AVATRIE APRIL 1948 KADIE

JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA



Famous for TRANSMITTERS . TRANSMIT COMPONENTS . TRANSMIT

TRIODES. TETRODES AND PENTODES . HIGH VAC AND MERCURY VAPOUR RECTIFIERS.



PHILIPS ELECTRICAL INDUSTRIES OF AUSTRALIA PTY. LTD.

MELBOURNE . O ADELAIDE



FOR THE EXPERIMENTER & RADIO ENTHUSIAST

Registered at G.P.O., Melbourne, for transmission by post as a periodical.





Get AM/FM (NB*) AT WILL!

Kingsley's research engineers have perfected an AM/FM (narrow band)

RELEASED DURING APRIL

Don't sit back and curse when one of the fellows calls you on F.M.—
flip the switch and be in a position to give him a critical report.

WATCH THIS SPACE IN THE NEXT ISSUE FOR FULL DETAILS.

KINGSLEY SIGNAL BOOSTER TYPE

S/W C

K/S9
6. 10. and 20 Metre Bands.

KINGSLEY

KF/C6 for use on the 6 Metre Bands

S/W CONVERTER TYPE If

Important

If your usual supplier is unable to supply your requirements of Kingsley Products, drop us a line mentioning his name and address

Send for full particulars of each.

Ask for—Insist on—DEMAND—genuine Kingsley Parts from your supplier!



KINGSLEY RADIO

KINGSLEY RADIO PTY. L

380 St. Kilda Road, Melbourne, Victoria . Phones: MX 1159, MX 3653

APRIL : 1948

EDITOR.

T. D. HOGAN, VK3HX, Telephone: UM 1732.

MANAGING EDITOR:

J. G. MARSLAND, VK3NY.

TECHNICAL EDITOR:

J. C. DUNCAN, VK3VZ.

COMPILATION:

R. W. HIGGINBOTHAM, VK3RN.

DISTRIBUTION:

H. N. STEVENS, VK310

* ADVERTISING REPRESENTATIVE:

W. J. LEWIS, 20 Queen Street, Melbourne, C.1. Telephone: MU 5154.

Printers:

H. HEARNE & CO. PTY. LTD.,
 285 Latrobe Street, Melbourne.

MSS. and Magazine Correspondence should.

be forwarded to the Editor, "Amateur Radio," Box 2611W, G.P.O., Melbourne, on or before the 15th of each month.

Subscription rate is 6/- per annum, in advance (post. paid).

Wireless Institute of Australia (Victorian Division) Rooms. Telephone FJ 6997.

_ IN THIS ISSUE _

Conversion of the SCR522	3
Going Portable with the Type 3	
Mark II	7
M.O.P.A. for 166 Mc. Band	9
Such Nice People	11
Short Circuits	12
Contest News	12
Fifty and Up	14
Federal, QSL, and Divisional	
Notes	15
Correspondence	24

AMATEUR RADIO

Published by The Wireless Institute of Australia, Law Court Chambers, 191 Queen Street, Melbourne, C.1

EDITORIAL

*

In order to represent the requirements of Australian Amateurs regarding the establishment of amateur band frequency allocations, action has been taken to present to the P.M.G.'s Department in tabulated form a complete picture of the amateur allocations as envisaged by the W.I.A. after consideration of the findings at the Atlantic City Conference.

To this end, a request has been made to the Department to consider changes to present allocations to provide as expeditiously as possible those frequencies upon which available Disposals equipment may be used without modification As a result of evidence placed before the Department by the Federal Executive of the W.I.A., a favorable decision has already been given in the case of the 144 Mc/s band. It is hoped that shortly a similar favorable decision may be reached on frequencies in the vicinity of 200 and 400 Mc/s. thus giving the Amateur a wide scope for experimentation on frequencies in which anomalous propogation conditions warrant considerable investigation. It is in fields such as this that information obtained by a body of widely dispersed stations can

prove of inestimable value in times of national emergency.

The present range of frequencies abovementioned would fill what would otherwise form a gap between our present lower frequencies and those of the ultra-high frequencies. Proposals have been made for an extension of some of the Atlantic City allocations in the lower frequency bands, where feasible in Zone 3. The present and future ultra - high frequency bands provide ample scope for those interested in the special problems associated with these more complex types of emission and equipments. Naturally enough, our requests cover consideration of the various types of emission from the bands in question, and include such types as facsimile television and such new techniques as may be developed.

It is hoped that the Department will see its way clear to give permission for the use of these facilities prior to the full implementation of the Atlantic City findings, provided that conditions existing in Zone 3 permit.

> W.R.G. G.G. W.T.S.M.



Homecusts

RADIO AND ELECTRICAL

JUST A FEW OF THE

HUNDREDS OF BARGAINS IN OUR STORE

HAM SPECIAL !!

Genuine Imported 815 TUBES 36/- plus Sales Tax



Bargain for the Set Builder! Bakelite CABINET, CHASSIS, DIAL ASSEMBLY, Front Mounting Plote, as illustrated. Only 45/- complete



AMPLIFIER CABINETS.—Steel Cobinets with Black Creckle Finish. Complete with Durch Aluminium Cheasis.

Amplifier of 15 wett 607
Amplifier 30 Wett Amplifier 12/9

SPECIAL CHASSIS BARGAIN.—Large Size for 30 Wett Amplifier 12/9

SPECIAL CHASSIS BARGAIN.—Carge Measuring 12/4 × 9 × 2/6

Amplifier 12/9

Amplifier 12/9

SPECIAL CHASSIS BARGAIN.—Carge Measuring 12/4 × 9 × 2/6

Amplifier 12/9

SPECIAL CHASSIS BARGAIN.—Carge 12/4 × 9 × 2/6

Amplifier 12/9

SPECIAL CHASSIS BARGAIN.—Carge 12/4 × 9 × 2/6

Amplifier 12/



Telephones with up to a 10 Miles Range, complete as illustrated £2/2/-Connecting Wire in one or two mile drums at £5 per mile.



Complete Range of the Famous IMPORTED UBES. Available for immediate delivery. Range includes:—25T, £3/11/-; RX21, £4/12/6; KY21, £5/17/-; 100TH, £5/4/10; 250TH,



Every Amateur and Serviceman should own A PALEC MODULATED OSCILLATOR. These Precision Instruments are the best value in Australia.

And these EXTRA SPECIAL SNAP BARGAINS?

- 1. 6" Loudspeakers, Reduced from 39/6 to 23/11.
- 4 mfd. 350 Volt, 200 mfd. 12 Volt Electrolytic Condensers. Reduced from 3/6 to 1/3.
- 3. STC Headphones. 50 ohm Type. Cut to 7/11.
- 2 Gang Standard Type Condensers. Reduced from 19/- to 12/11.
 15,000 ohm Voltage Dividers. Reduced from 4/6 to 1/8.
- from 4/6 to 1/3.

 6. 6000 Volt Working Condensers. Reduced from 22/6 to 3/11.
- 7. Iron Core Permatune Coils, Aerial, RF and Oscillator. Reduced from 3/6 to
- 4/11. 3. 4 Bonk D/W Switches. Reduced from 17/6 to 3/11.
- 17/6 to 3/11.

 2 Bank D/W Switches. Reduced from 12/6 to 2/11.

290 LONSDALE STREET

MELBOURNE. Cent. 4311 and at

- 211 Swanston Street. SYDNEY:
- 100 Clarence Street.

 BALLARAT:
- 307 Sturt Street.
- 26 Hunter Street.
- GEELONG: 132a Moorabool Street. TASMANIA:

TASMANIA: Hobart, Launceston and Burnie.

Model MO Without Output Meter, £32/17/6 plus 5.T. Model MO1 Without Output Meter, £37/10/- plus 5.T. Easy Terms Available. Write or Call for particulars.

CONVERSION OF THE SCR522

One of the best known v.h.f. sets in the R.A.A.E. was the U.S. Army SCR522, or English TR5043, operating in the region of 100 to 166 Mc. It operates from either 12 or 24 volt battery supply and may be converted to a.c. operation with little change in wiring.

In order to eliminate redundancy, information supplied by various authors has been intermingled during compilation. The Technical Advisory Committee of the Victorian Division feel that readers generally will appreciate the completeness of the picture thus

The SCR522 set-up comprises the

Transmitter	BC625	(Type	T5017)
Receiver	BC624	("	R5019)
Dynamotor	PE94	("	5016)
	FT244	(5009)
Case	CS80	(.,]	rR5043)
	BC602	(,,	5003)

interphone 629/631. PANEL MOUNTING THE BC625 TRANSMITTER

TRANSMITTER BY C. SERLE', VK3RX

By courtesy of Leo Meyerson, W0GFQ, the writer received the details of how one Ham adapted his set to work on 144 Mc., on which band we will all soon be working when the provisions

of the Atlantic City Conference agreement come into the picture in Australia. The BC625 transmitter makes an excellent little low-power job for mobile or home station. Having four crystal controlled channels with built-in phone or tone modulator and excellent frequency stability, it will give an admirable account of itself. (see block schematic Fig. 1)



Alternatively it may be used to drive a husky power amplifier on 144 Mc. if

It has seven tubes; 6666 as crystal conscillator with the plate circuit operaciellator with the plate circuit operawhich would be between 8,060 Rc. to 8,255 Kc. for the band 144-148 Mccscillator of the plate 144-148 Mccston 16 Mc. The second stage is a VT144 to 10 Mc. The second stage is a VT145 better known as 1240, used as a tripler to 48 Mc. The third stage is also a beautiful and the second stage is a VT145 beautiful and the second st of the crystal. The plate circuit of this stage utilizes a hairpin line type of tank inductance and a butterfly split-stator is bridged across it for tuning purposes.

The final r.f. stage makes use of another 832 operating straight through another 832 operating straight through an experiment of the stage of the st

To enable the transmitter to be used as a driver for a high-power stage in fixed station work, it was decided to remove the transmitter from the rack and case and mount it on a standard 7" x 19" panel.

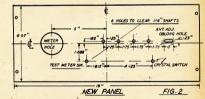
The panel was laid out according to the drilling sketch (Fig. 2) and two mounting brackets were made to bolt to the transmitter chassis. All controlled tuning is done in the conventional way. To avoid complications, the ingenious push-button ratchet-type tuning system was scuttled in favour of the regular tuning known.

and 12 volts for the heaters, which is most easily obtained by putting two 63 of around 13 damps. The negative bias requirement is —160 volts, by tapping some properties of a properties of a

Tront Panel Layout.—A new 4-position crystal switch is brought out through the front panel. The original crystal switch was removed and the wiring substituted on the new one. In the old one the three crystals not in the old one the three crystals not in the new arrangement to simplify the contact circuit. (Could be overcome by using shortling-type switch—Ed.)

using snorting-type switch—bdd using snorting-type switch—bdd unique lends as well as the final plate tuning are lined up in a group of four along the middle right of the panel. These saving the correct control of the switch control in the original transmitter, since each shaft is streved down to control in the original transmitter, since each shaft is threaded for a pre-set locking device. The rachet tuner need to control of the switch control of the switch

Originally the transmitter provided a



As well as tuning the transmitter to any of four pre-set channels, it tuned the receiver to the same pre-set frequency channel and selected the proper crystal in the BC625. Perhaps some Hams may like this feature to remain untouched and to tune the receiver with a geared gang, but that is a problem that they will have to work out for themselves.

First of all the power pack. The requirements are 300 volts at 260 Ma.,

pair of test pins to plug in a 1 Ma. test meter for tuning (resistance of meter 75 ohms). Each circuit was then selected by a 6-position test switch. The test meter was external and used only when the set was in for repairs or re-tuning.

As modified (see Fig. 4), the meter was made permanent on the panel and the leads soldered to the meter receptacle pins. This meter test switch also has a 4" extension shaft fitted so that it projects through the front panel. The six positions of the meter test switch correspond to the following circuits:

Position No. 1-1st frequency-multiplier plate circuit. Position No. 2-2nd frequency-multiplier plate circuit.

Position No. 3-Power Amplifier plate Position No. 4-Not used (some earl-

ier models used this position as an antenna indicator: it was discontinued on later sets). Position No. 5—Power Amplifier grid circuit.

Position No. 6-Not used. The antenna coupling is variable with a setscrew. This is adjusted through the oblong hole which is shown on the right hand end of the panel. A screw driver adjusts this feature. The final tube is held in place in the BC625 by a piece of Mycalex strip which is bolted

to the right cover plate enclosing the

final amplifier compartment. By turn-

ing four locking screws, tubes are easily changed, antenna coupling adjusted, etc.

Tuning Procedure.—Tuning up quite simple and straightforward. The circuits are designed so that there will be little likelihood of incorrect har-monics being selected. A loop absorption wave meter is still a most useful and handy gadget to have around just to make sure.

Using a power supply which delivers 300 volts and around 260 Ma., representative currents as read on the test meter will be:-

	Normal	Full Scale	Actual
Position	Reading	in Ma.	Current
No. 1	0.4	50	40
No. 2	0.5	100	50
No. 3	0.6 to 0.7	100	100
No. 4*	not used	-	-
No. 5	0.6 to 1.0	2	2
No. 6	not used	-	-
*where u	sed as r.f. ir	dicator, di	ode cur-

rent range is 0-1 Ma. MODIFICATION OF BC625 TRANSMITTER FOR USE AT 166 Mc. BY E. MANIFOLD, VK3EM

type trimmer capacitors to minimum capacity and spread each coil (antenna, r.f. and mixer) to 3/16" between turns. being careful to maintain the coupling of the coils with respect to one another, and peak the trimmers on the band.

9003 Harmonic Amplifier .- This stage is retained as a straight amplifier bemixer without further alteration, and if removed would necessitate series resistor to replace heater and some complications in coupling the oscillator to

the mixer. The hairpin coupling loop needs to be squeezed together as close as possible, without actually touching, for the full length of the parallel section leaving the loop at the end coupled to the mixer in the same position as previously. The trimmer is unscrewed to minimum capacity, slight readjustment may be neces-

9002 Harmonic Generator.—This stage becomes the v.h.f. ultraudion oscillator As before the trimmer is set to minimum capacity and the coil spread to 3/16" spacing between turns. When aligning receiver the oscillator trimmer should be adjusted to put the oscillator

sary when re-aligning.



Hereunder is listed the line up of tubes in the receiver showing modifications required as pictured in Fig. 3:-

9003, R.F. Amplifier-Tuning range extended.

9003, R.F. Mixer-Tuning range extended.

9003. Harmonic Amplifier - Tuning range extended 9002. Harmonic Generator-Becomes

v.h.f. oscillator. 12AH7GT, Squelch Tube—Becomes first audio amplifier.

12AH7GT, Crystal Oscillator-Becomes "S" meter tube 12SG7, 1st I.F. (12 Mc.)-Remains as

original 12SG7, 2nd I.F. (12 Mc.)-Remains as original

12SG7, 3rd I.F. (12 Mc.)-Remains as original

12C8, 2nd Det./A.V.C.-Removed entirely* 12J5GT. Output-Removed entirely*.

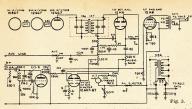
12H6, A.V.C. Delay—Becomes 2nd Det. and A.N.L.* 12H6, Noise Limiter.

Note.—The 12H6 is only installed in the BC624M. The "M" denoting modified receivers. Refer to Fig. 1 in "Amateur Radio," January, 1948, page 3, for block schem-

atic of original receiver 9003 R.F. Amplifier and Mixer Stages. -The only modification to these stages necessary to enable them to cover the 166 Mc. band is to unscrew the slug-

†It is unfortunate that the news of the release of the 144-148 Mc. band was received just as we were going to press. Nevertheless the articles as they stand deal more specifically with structural alterations, and for that reason we decided to go ahead and use the articles-Editor.

267 Jasper Road, McKinnon, Victoria. *Optional.



on approximately 162/163 Mc, that is, 12 Mc. lower in frequency than the r.f. and mixer stages.

Since this tube is to operate as an oscillator, the grid is disconnected from the 12AH7GT crystal oscillator stage

and connected back to B+ end of the plate tank coil through a small 15 pF. condenser. Small by-pass capacitor between grid and chassis must be removed, also the 560 K ohm grid resistor. Substitute the latter with 50 K ohm resistor. The cathode resistor must either be removed or shorted out.

The B+ end of the plate tank coil is normally by-passed to chassis by two 100 pF. capacitors; these are removed, but the plate decoupling resistor is left in circuit as a substitute for an r.f. choke, furthermore it is possible to determine whether the 9002 is oscillating by measuring voltage drop across this

12AH7GT.-Remove all components in both the squeich circuit and the crystal oscillator stages as these units have no application of any value on amateur bands, other than the conversion in which the 12AH7GT and some of

the components are used as the first audio and "S" meter tube—see Fig. 3. 12SG7 LF. Stages.—These stages are

128G7 LF. Stages,—These stages are left entirely as they stand except for later alignment on 12 Mc. Modification of Audio Stage and in-clusion of "S" Meter.—After using the unmodified version referred to above, the writer became convinced that the the modifications shown in Fig. 3. Fur-thermore, the addition of an "S" meter provided means of investigating more accurately the causes of variation in day to day signal strengths, plus the ability to determine back to front ratio of beam antennae, etc.

General.-At this stage if may be stated that it is not necessary to modify the 12C8 second detector/a.v.c. (a.n.l. if 12H6 is installed) and 12J5 audio section of the unit as it will work quite well for headphone reception; however for speaker operation a 12A6, which is closely equivalent to 6V6 except for heater requirements, will show a decided improvement on this band where signals are nearly all speaker strength. Should the unit be left as is, it is suggested that intercom, and inter-stage

transformer (295) be removed and the grid of the 12C8 reconnected to the audio coupling capacitor from detector diode. This can be found by tracing back the wire from the centre lug of the gain control.

The "ten" pin Jones' plug carries the power and miscellaneous connections as follows:-

Pin 1: Nil 2: Nil.

3: 300 volts. 4: A.F. Output. 5: 300 volts. 6: A.V.C 7: Ground/Chassis. 13 volt Heaters.

9: Transmitter sidetone. 10: Crew mikes. 11: Transmitter sidetone. 12: Crew mikes.

Of the above, pins 3 and 5 are bridged for h.t. requirements to r.f., i.f. and a.f sections. In the original unit the r.f. and i.f. stages were switched off separately

on transmit position, while the audio was retained for sidetone and intercom. continuously. Alignment of the Receiver .- As most chaps will not have any form of modu-

lated oscillator, the next best thing is to use the super-regen receiver to provide clue to the band location and alignment. For best alignment choose the weakest station and tune to it. Check the 9002 for oscillation, this is simple as the plate voltage is dropped through series dropping resistor, and if the 9002 is not oscillating the voltage will be from 80/100 volts, whereas when oscillating, voltage will be 120/150 volts

(1,000 ohms per volt meter).
Tune through 90° rotation of capacitor
to ensure that the oscillator is stable and check for frequency drift against good heterodyne frequency meter or receiver having known performance. See that all trimmers are in minimum position r.f. (2), mixer (1), r.f.-p.a. (1), osc. (1), and then turn all tuning capactors to minimum capacity. Use superregen, receiver to locate the band and supply the "noise" hash while peaking oscillator trimmer and determining best operating position of oscillator frequency, that is, above or below signal frequency, normally above.

Finally peak up on a signal at 166 Mc. plus inevitable motor car noises.

MODIFYING POWER SUPPLY AND CONTROL CIRCUITS FOR A.C. OPERATION

BY E. MANIFOLD, VK3EM As indicated by VK3RX, the h.t. re-

quirements are 300 volts d.c. at 260 Ma., bias requirements are -150 volts d.c. at 10 Ma., and microphone supply 6-8 volts d.c.

Heaters and relays normally require 12-14 volts d.c. from battery, rectifier or other d.c. source. Alternatively the heaters may be operated from a.c. by arranging two 6.3 volt windings in series. Each winding should have a capacity of 3 amps. unless four windings are used and transmitter and receiver load divided. When the heaters are operated from

a.c. the relay circuits must either be rendered inoperative, used with batters or rectifier having one ampere capacity, or 1/12A type rectifiers connected in series with each individual relay.

Disconnecting the Transmitter from the Assembly "Rack".—In order to carry out any modifications it will be necessary to disconnect the transmitter from the "Rack." To do this the four red painted screws in the corners of the rack are unscrewed. After making sure that all tuning slides are disengaged. lift off rack. Warning! Unless disengaged slides will be damaged during removal process.

With rack removed only one crystal channel will be available, unless of course suitable manual control is substituted. The channel referred to can be made operative by pushing top slide as far as possible under top plate of tuning assembly, and inserting a spacer between the end of top slide and next one down to hold former in position. Unless this is done crystal will not be switched into circuit.

Loosen all locking bars on top of the tuning dials before attempting to turn dials while slide is in position.

Channel "D" Relay (130), which is located alongside the gain control, should either be removed or have one side of coil disconnected for a.c. opera-tion, as it is normally energised and would buzz continuously with a.c. in the winding. The original purpose of the relay was to change the transmitter and receiver automatically to channel "D" for d.f. purposes when m.c.w. was used. If relay is removed connections should be carefully isolated and ends well insulated.

Relay 131 may be used to change from phone to m.c.w. by employing suitable connections between pin No. 6 of mike/key plug and d.c. operating supply.

Antenna change-over h.t. relay, motor controller and associated relays are all incorporated in the rack. The former can be employed in conjunction with external relay supply if desired, while remainder are left disconnected.

Connections to Power Input Plug. or if you insist, male socket, is an 8 pin Jones' type located at centre of chassis with connections as follows:-

Pin 1: -150 volts. 2: +13 volts.

3: 300/320 volts, 260 Ma. 4: Bridged to No. 3.

5: Sidetone (not used). 6: Sidetone (not used).

7: Press to transmit (not used) 8: Ground B- C+. Connections to Mike/Key Input Plug. -This plug is on the same side as the meter switch and at end of chassis. Key connections used with 13 volts d.c. only. Connections are as follows:-

Pin 1: Primary mike transformer, 250 Ohms. 2: Primary mike transformer, 250 Ohms (opposite end).

3: Transmit (not used) Channel selector common (not

used). Channel "D" (not used). : Contactor/Key 13 volts d.c. only.

7: Press to transmit, used d.c. only.

8: Nil connection.

MODIFICATIONS TO BC624 RECEIVER FOR USE AT 166 Mc.† BY E. MANIFOLD', VK3EM

Tuning Coil C.O./Doubler Plate (6G6G) .- The original 111 turn coil was reduced by removing two turns from the bottom end of the coil, leaving 94 turns. This enabled the doubler tank to resonate at the higher frequency required, that is, in the 18 Mc, range provided by doubling crystals in the 9.2 to 9.4 range or tripling crystals in the 6.13 to 6.26 Mc. range. First Tripler Plate Tuning Coil

(12A6).-Having in mind the possibility of 144-148 Mc. operation at a future date, the original wire was removed from the former and stored for further use. Twelve turns of 16 s.w.g. enamelled copper wire were then wound on to original former. Tap was provided at 7 turns for out of phase drive necessary for second tripler p.p. grids. Be sure to note original phasing before removing

the coil. Second Tripler Plate Tuning Assembly (832).-This consists of linear tank on the underside of the chassis, and requires very little alteration other than gently squeezing two legs of the hairpin

loop together, until spacing is equal to one diameter of the wire (approximately 3/32") remains for the entire length. would permit, extreme care being

Power Amplifier (832).-Plate coil may be made to resonate to 170 Mc .merely by spreading the turns. In the writer's case turns were spread over and apart as far as the connections

taken to remove all stress from the ceramic capacitor ends while spreading turns (replacements are not available for ceramics in question). The coils could be removed with a large soldering iron; but can be spread far enough to cover the band if sufficient

care is taken. Original spacing of coil is equivalent to wire diameter between each two-turn section and approximately two di-ameters' spacing between the antenna coupling coil and plate coil. Latter spacing should be maintained, while each two-turn section is spread to approximately 7/16" between turns.

The adjustments to coils as outlined above should enable all tuning capacitors to be adjusted to approximatey 150-156 Mc. calibration points on each of four dials on top of the unit; any large variation of tuning of any particular control indicates that wrong harmonic is being selected. An active crystal may produce numerous harmonics; hence the tuning should be checked with the station absorption wavemeter or lecher wires before going on the air.

Tuning.-Tuning is rather unorthodox insofar as general Ham practise is concerned. Assuming power supply and antenna have been connected, crystal and 0-1 Ma. meter inserted, proceed as follows:-

(a) Tune first doubler (left hand end of slide mechanism) for maxi-(Continued on page 11)

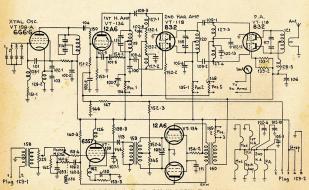


Fig. 4: Simplified Schematic Circuit of Modified BC625 Transmitter.

Going Portable With Type 3 Mark II BY C. C. QUIN*, VK3WQ

The Type 3 Mark II set is by no means a stay-at-home affair. It is a well-designed set, and to the keen Amateur it will provide many opportunities to experiment in numerous ways, several of which were dealt with in December, 1947, issue of this journal. If you intend to go portable the following mechanical and electrical modifications can be made.

To make this DOWER SUPPLY more universal, a miniature bakelite wafer octal socket was mounted in place of the on and off switch and fuse plate. The plate can be cut into four sections and the respective titlings cemented above and below the switch and fuses. A §" hole was drilled below this and a rubber grommet inserted to protect the wires.

The following connections were made to the octal socket:-

- No. 1-Filament.
- 2-500 volts from power supply. 3-500 volts to transmitter.
- 4-250 volts from power supply. 5-250 volts to transmitter.
- 6-Receiver output (see text later). 7-Wander lead to "hot" side of
- the key socket on transmitter. 8_Forth

°111 Edgevale Road, Kew. E.4, Victoria.

It will be noticed that RECEIVER RECEIVER the lead to the power supply uses only five of the six pins. An external wire was joined from the "hot" side of output transformer to the sixth (the right-hand pin), which was connected to No. 6 pin on the octal socket, as mentioned previously.

TRANSMITTER Although not mentioned in December "Amateur Radio," several Amateurs have modified the bakelite portion of SW.4, section C. In the circuit it will he noticed there is a spare contact located between the contacts of R16B. When using plate and screen modulation with a dropping resistor between 500 volts tap and the screen of the 6L6 p.a., it will be found that the 6L6 will draw current if the key socket is short-ed whilst on "receive" position. To ed whilst on "receive" position. To obviate this, the earthed side of the key socket is taken to the aforementioned switch contact, and by fitting a jumper wire across the key socket this action will obviate the use of an extra switch unless use is made of a relay, as sug-gested in the latter part of the Decemher article

Incidentally, it will be obvious that the "T.S.R." switch must be left in the "S" position for the system to work, and it is further explained that the receiver power supply was used for the modulator when transmitting As a precaution against burns when using the "T.S.R." switch, fit an exten-sion shaft about 3" long.

MINIATURE The spares box

LOUD SPEAKER mor mod to house a dynamic earpiece, which is mounted partly beneath the key at the top end of the lid, so that it protrudes into the smaller spare tube compartment of the box. The division was split and a portion turned down to allow leads to pass. The "hot" lead of the receiver was taken

to the dynamic earpiece.

A "Don 5" handset and socket was used and the 4-pin socket mounted to one side of the lid, and when plugged in, the earpiece (wired in parallel with the dynamic earpiece) provides addi-tional facilities for listening to weak signals, though this is hardly needed, as most signals can be read quite easily from the dynamic earpiece.

As suggested by Ian Sewell VK3IK. MODULATION and also by Harold Webber VK3PW, it was found that a single 6V6 can be used as a series modulator as per circuit Note that a 4.5 volt battery is essential

These Snaps' 'Sound' Good From Vealls

- * MARMAC ELECTRIC GRAMO MOTORS with
- * TAYLOR TRANSMITTING TUBES. range available!
- * MAGNAVOX PERMAG. SPEAKERS. 8 in., 10 in., and 12 in.

Radio hams and RADIO CHASSIS hobbyists- Vealls will cut that Chassis you need to any size. any

MINIVOX THREE AC MIDGET RADIO KIT Enjoy the thrill and satisfaction of building this compact, high-performance midget radio. An ideal second set for your home. The complete kit of parts is available at Yeells. Attr. cively priced at £7/13/6 (without Cabinet).

VEALLSEstablished 1911 Produce and Record Your Own Show with the "VIBREX" HOME RECORDER

aa a🕰

243 Swanston St., Melbourne E13145 299 Chapel St., Prahran LA 1605 Mail Orders Box: 2141T, G.P.O. Melb.



Features :

- * Special heavy duty Turn-table and Synchronized Motor.
- + No overhead traversing
- Separate Cutter and P ay
 - Back Arms.
 Ball bearing mounting in
 Play Back Arm permits
 perfect tracking and
 balance Price £48/10/0

to provide sufficient drive to the 6V6 This tube, together with associated anparatus, was mounted on the lid of the spares box, still leaving space underneath for spares.

For Series Modulation. an octal plug is plugged into the socket of the power supply, with pins No. 2 and 3 jumpered, and No. 4 and No. 5 jumpered. The other leads, Nos. 1, 6, 7 and 8, go through a grommetted hole in the lid of the spares box to supply the series modulator. change-over switch is also used to change to c.w. and for tuning-up purposes, SW2 is, of course, the pressel switch on the "Don 5" handset.

MIDGET SPEAKER TRANS. KE 6V6GT/G FIG.I MODULATOR.

earlier.

For both this and cathode modulation the key click filter condenser C23 (behind the earth terminal on the transmitter) must be disconnected.

For Cathode Modulation, the matching transformer from the output of the modulator is connected to No. 7 and 8 pins of the octal socket (jumpers on No. 2 and No. 3, No. 4 and No. 5, as above), with switch or relay contacts in series or straight into key socket.

For Plate and Screen Modulation, the matching transformer is connected between No. 2 and No. 3 pins, and No. CRYSTALS Herb Stevens VK3JO. suggested an adaptor socket for using miniature crystal holders. This is made by cutting the filament and grid pins off a UY base and soldering filament pins to the plate and cathode pins, spacing the same to take the pins of the crystal holder. Solder the holder pins at an angle of about 45 degrees and it will facilitate quick changes-see Figure 2.

4 and No. 5, also No. 7 and No. 8 pins

are jumpered, keeping in mind the al-teration made to the switch contact as

mentioned in paragraph on transmitter

LINK COUPLING Upon examination of the circuit it will be found that no useful



the centre pins of the plate tank coil socket. Remove this jumper and the link may be wired to these, add another antenna terminal, and this facility may be used. Four turns will usually be sufficient on 7 Mc, at the cold end of the coil.

INSTITUTE BLOCKS

The attention of members of the Victorian Division is again drawn to the fact that the Council have obtained a number of printing blocks of the In-stitute badge. There are two sizes, one the size of the badge which appears on the front cover of this Magazine and the other the size which is at the heading of the Divisional Notes. These blocks may be had on loan by applying to the Administrative Secretary, 191 Queen Street Melbourne C.1



Interstate Representatives

N.S.W. : L. B. Graham, 5 North York St SYDNEY

QUEENSLAND : handlers Pty. Ltd. Cnr. Albert and BRISBANE

C. N. Muller brando Buildings ADELAIDE BENOUIRE FROM YOUR NEAREST SUPPLIER D. Benjamir Murray Street PERTH

& G. Genders Pty. Ltd.

M.O.P.A. FOR 166 Mc. BAND

BY J. M. COULTER*, VK5JD

The modulated oscillator has much to commend it as a band "opener." It is simple and inexpensive for the initial work. However, it will soon be discarded by the serious experimenter.

In the writer's case the modulated oscillator was more or less useless as the QTH is not particularly good and all other interested persons were located some 5 or 6 miles distance, across the city. It was therefore decided that a more efficient rig was necessary. Taking into consideration present conditions and gear available, it seemed that a simple mo.p.a. would be suitable.

The tubes chosen were 815 p.a. (832 or 829 should be better) with a push-

The Oscillator.—This is the familiar parallel line, plato/cathode arrangement with the addition of an idea gloaned from an old copy of R.C.A. application notes. This results in greater efficiency and the power of the oscillator is much nexcess of that required. The reserve power permits light coupling to the power amplifier, a desirable feature, if the maximum stability is to be obtained.

The plate line is constructed from half inch copper tubing with a solid shorting bar sweeted in position. The shorting bar is drilled and the tubing bar is drilled and the shorting bar is drilled in the short in t

The cathode line, arranged beneath the chasis, is constructed of quarter inch copper tubing and is supported at the control of the control of

Power Amplifier.—The p.a. chassis mounted vertically at the feed end of oscillator lines. This enables the use of extremely short leads in the grid circuit and the grid coupling is adjusted until the required drive is obtained. Four Ma. being sufficient to drive the \$15 to the recommended input at 166

Some difficulty was experienced with the p.a. until it was realised that neutralisation was necessary at this frequency. However, the tube is quite stable once it is properly neutralised. The neutralising condensers consist of two lengths of 14 gauge wire placed

*49 Farnham Rd., Ashford, South Aus.

alongside the glass envelope and bent into the position which neutralises the feed back.

The plate line of the p.a. has a heavy shorting bar sweated to the feed end and another sliding bar to tune to resonance. The latter bar is the sole support for the line.

The usual screen by-pass condenser has been omitted as this resulted in far better performance. The reasoning behind this may be argued further but for the present the writer is satisfied

with results.

Several methods of coupling to the
"J" antenna have been tried but that

shown appears to be the most efficient.

The Modulator.—Approximately 15 watts of audio are required and this is easily obtained with a pair of 6L6s or 807s. The present modulator was de-

change. However, no frequency change has been made here for some time as the "J" antenna appears to favor one frequency and one only.

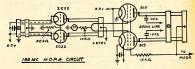
The antenna is constructed of §" aluminium tubing, the separation of the "J" section being two inches centre. The 450 chm line is spaced two inches also and the point of connection the antenna operation of the antenna operations of the antenna would be an improvement in that all joints could be sweated.

Tuning Up Procedure.—To tune a transmitter of this type, it is advisable to insert a milliammeter in the oscillator h.t. lead and also one in the grid return to the power amplifier.

Remove the h.t. from plate and screen

of the power amplifier and apply ht.
tonly to the oscillator. Move the cathode
shorting bar of the oscillator until the
plate current dips. The meter in the
power amplifier grid circuit should now
show rectified r.f., indicating that the
oscillator is delivering power to the grid
circuit.

Check the frequency of the oscillator by means of an absorption wavemeter or Lecher wires. If the frequency is not correct, after the shorting bar position on the oscillator plate lines and again



scribed in QST, September 1946. It has one very desirable feature—the mike battery (?) is never flat!

Construction and Adjustments.— Both oscillator and p.a. chassis are of aluminium 16" x 5½" x 1½". A minimum of insulating materials have been used. Air, even though the cheapest insulator, is still the best.

The shorting bars may seem rather solid but they pay dividends in performance. The original experimental "shorts" were made of light material but were discarded as they could not be clamped securely enough.

The flexible plate and grid leads are made of soft copper strip in preference to braid, this being commercial practice, even on low frequencies.

The tuning of similar rigs has been described quite frequently and no difficulty should be experienced.

As mentioned previously the oscillator plate line is fixed and the length given results in a frequency of between 168-169 Mc. Oscillator cathode line and p.a. plate line is more than long enough to take care of any desired frequency adjust the cathode shorting bar for plate current dip.

After the correct frequency is obtained, the wire inductance loop on the grids of the power amplifier should be varied to obtain the recommended grid drive. The meter should now be shifted from

the oscillator to the power amplifier ht. Apply h.t. to the plate and screen of the power amplifier, and adjust the shorting bar for minimum current, then move the feeder taps forward or back along the plate lines until proper loading of the final is obtained.

If neutralisation is necessary it should be carried out as mentioned previously. Finally the frequency of the transmitter should again be checked to see that the adjustments on the power amplifer how not altered the oscillator

that the adjustments on the power amplifier have not altered the oscillator frequency.

LINE ELEMENT DIMENSIONS

*Centre to Centre. †Gauge.

HAM RADIO SUPPLIERS

18 SWAN STREET, RICHMOND

Large Clearance Surplus Stocks

A.R.8 RECEIVERS, 11 Valve, 6 Band Switching from 15 Megs. to 150 Kc, continuous coverage. Good condition. Easily converted to A.C. or D.C. power supply operation. Ideal ham work. While they last, less Power Supply £12/10/0

TRANSMITTERS, A.T.5, 50 worth. Phone or C.W. stal or V.M.O. Tube line up. 6V6 Osc., 807 Doubler, 2 807 in final. Ideal Ham Rig covering 20, 40, 80 Metres. Also Broadcast Band to 150 Kc. Meter for all stoles easily adapted to A.C. or D.C. Power supply. While they lest, £10 cach. Cheeper ones to choose from.

TRANSCEIVERS. English R.A.F. xtal controlled, covers 40 and 80 Metre Band, including 2 Metres. 0—30 Mill, 0—5 Ammeter Thermo Couple. Full of excellent parts suitable for rebuilding the rig. To clear . £2 each

TRANSCEIVERS, 8: velve English High Frequency, Uses CY6, WR65A, 2 6J5, 4 65A. Genemotor 9 volts in-TRANSCEIVERS, 12 volve American High Frequency, Uses 3 7193, 7 65H7, 2 6H6 reloys. Genemotor 9 volts input. Output 450 volts, 60 Mills. Complete with all volves. AMERICAN R.C.A. 3 volve Receiver, Model DZZ, Covers

Broadcas tand long wave frequency, 750 Kc to 32.5 Kc. Easily converted ao good broadcast receiver. Less Power Supply, Few only, £9 each High Frequency Receivers, A.S.Y. 11 Tube. Uses 5

High Frequency Receivers, A.S.V. 11 Tube. Uses 5 valve mixer stage, 955, 956. 6 I.F. stages using 1852 I.F. freq. 28 Megs. 5V4 Rectifier. Easily convertible 144 or 166 Megs. Special Price £9

CONDENSERS. We have a huge stock of Condensers, all types and sizes. .01 M.F.D., 2 M.F.D., 4 M.F.D., 1000 volts working. Try us first for your needs.

AERIAL COUPLING UNIT. AT5-AR8. Matches 100 ohm link to any leggth or type of Aerial. Complete with 12 volt Relay and R.F. Meter. OUR PRICE, £1/10/0 each.

AMERICAN TYPE C.R.V. 52233. 6 valve, covers 40 and 80 metres Bands. Valve line-up, 2—6N7's, 1—807, 1—YR150 into 2—815's. Two slide in Coils. Phone M.C.W., C.W. An excellent buy at £9, less power supply.

OSCILLATOR. 75 meg., complete with output meter, vrey elaborate, 230 A.C. operated £25

AMERICAN TRANSMITTERS.—20-watt Plug-in band type, CBY 52063A. Phone or C.W. valve line-up, 2 89's into 2 837's. RF meter, &c. Limited quantity only. £8/10/0

REMOTE CONTROL UNITS, complete with mic. and phones. Morse key. Can be used for house phones, &c. Condition as new. To clear £1 each Order now.

TRANSMITTER. American type, BC-191-E, 100-watt, phone or C.W. Precision built 4 Plug-in band change coils. Very elaborate power supply, adjustable filament and H. tension voltages, circuit breakers, relays, &c. A beautiful job: a welcome addition to any ham shack. Price

METERS.—All types. R.F. Thermo Couple, 0 to 1 A.M.P. D.C.

FILTER CHOKES AND CONDENSERS, RESISTORS, VARIABLE AND FIXED.

VALVES.—We have large quantity of all types of Valves. Transmitting and Receiving.

Inspect all these Items at

HAM RADIO SUPPLIERS

18 Swan Street . . . Richmond

Phone: JA 2584

After Hours: Haw. 4465

SPECIAL ATTENTION GIVEN TO COUNTRY MAIL ORDERS.

SUCH NICE PEOPLE

The interest aroused by the directive of the Victorian Council concerning the publication of this column under the "nom-de-plume" of "Gremlin," is to my knowledge, the greatest since the end of World War II when the question of the day was "When do we get back on the air."

Victorian Council, in issuing this directive, were solely activated by the facts then in their possession, facts which showed that the articles were causing considerable disagreement withmaking the decision, showed that on the facts they acted in the best interests of Amsteur Radio in Australia, and on those facts, I am of the opinion that conceil was per early justified in taking do not be completely acted by the conceil was per early justified in taking

However at a Victorian Divisional meeting members expressed themselves in no uncertain terms, of their disagreement of the directive. Letters received by me since the publication of the March issue of "Amateur Radio" express apsire the continuance of the articles. In view of the expression of opinion

In view of the expression of opinion at the meeting. Victorian Council, at its following meeting, rescinded its motion directing "Gremlin" to sign his name or forbidding me to publish his article if he did not do so.

This action by Victorian Council in admitting that they made a mistake, of perhaps jumping too hastily, will I feel sure, receive the commendation of all members of the Institute, no matter to

which Division they belong. I believe that Council by their decision have won the confidence of members of the Victorian Division (whom they represent) if not that of the majority of Amateurs in Australia.

The "Status Quo" of "Gremlin" having been restored, it is regretted that the usual article will not appear this month. The decision to allow "Gremlin" to continue was only made a few days before the writing of this, and a few days before going to press. The Post Office has been working overtime between myself and the "Gremlin" in an endeavour to have the usual article

ready for this issue.

Unfortunately the "Gremlin" had ceased logging offenders during the ban and consequently the time factor did not allow "Gremlin" to get the article to me in time for inclusion in the April

However the May issue will see "Gremin" back with the usual article, perhaps written in a different style, as from now on the date of the offence will appear, together with the reason why a "mention" was deserved. I believe by a familiar with the regulations, as well as becoming more conscious of the sloppy operating, poor signals, and speech which is present our bands today.

I believe, in fact I have heard, that the identity of "Gremlin" has been someone residing in VK3—don't be too sure about this for it is possible that he resides in one of the other States. In fact "Gremlin" may be one of your best friends.

THOMAS D. HOGAN, Editor.

CONVERSION OF SCR522

(Continued from page 6) mum reading of meter in position No. 1 (approximately 0.5 to 0.7 Ma)

(b) Switch meter to No. 2 position and tune No. 2 control; that is, first tripler for maximum indication (approximately 0.5 to 0.7 Ma.)

Ma.).
(c) Set meter switch to No. 3 position and tune No. 3 dial (second trip-

ler) for maximum reading.

(d) Without shifting the meter switch
from No. 3 position adjust No. 4
all previous cases meter has been
in the plate circuit of succeeding
stage, hence tuning has been for
the meter is in plate circuit of
stage being tuned, namely the
final amplifier. Reading should
meter scale. 0.3 and 0.68 Ma. on
meter scale. 0.5 and 0.68 Ma. on

(e) Switch meter to position No. 5 and retune all stages for maximum indication possible. Final adjustments should always be made with antenna connected. Any indication greater than half scale in this position is considered satisfactory.

ALTERATION TO V.H.F. BAND
As a result of negotiations between
Federal Executive and the P.M.G's.

Federal Executive and the P.M.Cs. Department the band 144 to 148 Mc. becomes available for exclsuive Amateur use as from the 1st May, 1948. This band replaces the 166 to 170 Mc. band.

SUBSCRIPTIONS arranged to any Magazine or Paper throughout the World

SCIENTIFIC AND PHOTOGRAPHY-RADIO-£1 Popular Science Popular Mechanics Mechanix Illustrated Audio Engineering Communications Science ond Mechani Science Digest American Photography £2 £3 £1 F.M. and Television 19 £1 £1 £1 Proceedings of the Camera Popular Photograph **ENGLISH** £1 12 Electronic Engineering Practical Wireless AUSTRALIAN

WRITE FOR LIST ON THE SUBJECTS YOU ARE INTERESTED IN.

McGILL'S AUTH-NEWS AGENCY

Established 1860.

183-85 ELIZABETH STREET, MELBOURNE, C.1., VICTORIA.

(The G.P.O. is opposite). TELEPHONE: C. 8113-4.

SHORT CIRCUITS

LINING UP I.F.Ts., B.F.O. COILS, ETC.

Sometimes it becomes necessary to check the resonant frequency of an i.f.t. or b.f.o. after making alterations to it; e.g. adapting an ordinary i.f.t. for

the crystal filter described in a previous issue

In the Ham shack the procedure can be simplified with the following scheme. using a receiver which has already been correctly aligned. Separately parallel the primary and the secondary across the grid circuit of the i.f. channel of the receiver, and tune for maximum signal output. If the receiver i.f. stage has grid cap valves, the coil under test is simply connected between the grid cap of the i.f. valve and chassis, remembering that this will effect the a.v.c. line unless it is switched off.

The theory is simple and can be ap plied to almost all such circuits. Parallel resonant circuits reflect pure resistance at the resonant frequency of the l.c.r. circuit, therefore at resonance the addition of the i.f. circuit under test will make little or no difference to the output of the receiver. Off resonance tuning will place a detuning inductive or capacitive load across the receiver i.f. circuit, hence a drop in signal strength.-VK5XU.

NOTES ON CLEANING CRYSTALS

Undoubtedly there is hardly an Amateur who has not removed the crystal the from his transmitter and taken holder apart for some reason or other. Usually it was because the crystal did not operate properly. The remedy was to wash the crystal with carbon tetrachloride or another cleaning fluid. Nine times out of ten, the rig would then operate correctly and everyone was happy for a few months until the action had to be repeated.

However, in the past five years tech-niques in the manufacture of quartz crystals for frequency stabilization have changed tremendously, and there will be relatively little need for cleaning a crystal made in these years.

It was learned during the war that crystals changed frequency while resting on the shelves awaiting shipment. The ultimate solution of the fault wa to eliminate the use of abrasives as well as carbon tetrachloride in the final finishing. It was observed that abrasives left a broken surface which rearranged itself constantly, and that carbon tetrachloride left a residue which was detrimental to the oscillating qualities of the crystal. Thus was adopted the acid etch or fluoric etch process to finish the crystals, plus the use of warm water and soap to keep them clean. The result is that now, with the use of air-tight and hermetically-sealed holders, it is not necessary or even possible to remove the blank!

If you do happen to have a pre-war crystal and it does need cleaning, do it in the following manner: Lay the crystal on a piece of clean cheese-cloth or kitchen toweling, and using a toothbrush CONTEST NEWS

RESULTS OF W.I.A. NATIONAL FIELD DAY Very little interest was shown in the National Field Day, and results were very disappointing, as only two logs were received and it is believed that only two or three other stations participated. The results are as follows: Section:

VK3ADF, 224 points; VK3UM, 153 pts. W. Section:---VK3UM, 150 pts.; VK3ADF, 132 pts.

VK3ADF. VK3ADF, situated two miles north of Warrandyte, worked four bands, using a Type 3 Mark II and a 28 Mc. transmitter with an 832 in the final. Receiver was the Type 3 Mark II and a converter. Operators were VK\$ADF and VK\$YS.

Operators were VKSADF and Vhols.
VKSUM also used a Type 3 Mark II and was
situated on One Tree Hill, in the Dandenoug
Ranges. Operators were VKSUM and VKSUH.
Both these stations worked 4 continents, namely North America, Africa, Asia and Oceana.

It is hoped that considerably more interest will be shown in the National Field Day in the future, RULES FOR THE 1948 TRANS-TASMAN CONTEST 1. The Contest will commence at 0400 hours GMT on Saturday, 15th May, and continue until 9200 hours GMT on Sanday, 16th May, 2. The Contest will be divided into three (3) Sections, namely Phone, C.W. and Open. The Open Section will be a combination of Phone and C.W.

operation. A contestant may enter for each or all Sections provided a separate log is submitted for each Section entered. 3. Operation may be on any licenced Amateur band, and transmissions will be in accordance with band, and transmissions will be in accordance with existing Regulations.

4. A six number serial group must be exchanged before any points can be claimed. The first three numbers chosen by the station will be retained throughout the Contest, and the second three num-bers will commence 001 with the station's first

contact, 002 with the station's second contact and

contact, the was seen as the contract, the contract of the con

points will see mutipied by the Manuer of Za-Districts worked on each band in the case of VKs, and the total number of VK Districts worked on each band in the case of ZLe. For the purposes of this Contest, the prefixes VK2, VK3, VK4, etc., will constitute Districts, (VK5 in Darwin will will constitute Districts. (VRGs in Darwin not count as separate multipliers). ZL prefixes likewise will count as multipliers for VKs. ilkewise will count as multipliers for VKs.

7. A log showing Date, Time (GMT), Station
Worked, Band, Number Sent, Number Received, and
Foints claimed must be sent to reach the Federal
Executive, Box 2611W, G.P.O., Melbourne, not later
than 5th June, 1948. The log must be signed by
the operator with a statement that he has compiled with the existing Regulations, and a statemiddle with the continue of the control of the

pure soap and warm water, scrub both sides of the blank carefully. Then rinse in clean water, and make absolutely sure that the crystal is free from all soap and dirt. Rest the crystal on edge and let dry. While it is drying, wash the crystal electrodes in the same manner, and blow all of the dust and residue from the holder, being careful not to get any moisture in the holder. After everything is dry reassemble the works. Cleanliness is an important factor, so keep your fingers off the surfaces of the crystal and electrodes. If you take the extra precaution of sealing the top carefully with shellac, you will probably never have to take the holder apart again.-QST, July, 1946.

CLOGGING DRILLS

When drilling aluminum with high speed carbon drills the metal burrs over the cutting edge. Libricate by having a small jar of turpentine into which the drill can be dipped during workingthe turps evaporates and cleans. Next best is a light oil like 3 in 1.

ment of the power input to the final stage of the Awards.—Attractive Certificates will be AWMGS.—Attractive Certificates will be awarded in each Section to the outright winners in VK and ZL, and also to the winners of each Section in each District of VK and ZL. The out-right winners will not be eligible for the District

1947 W.LA. DX CONTEST There were a number of logs for the Contest arrived quite some time after the closing date, and it is regretted they could not be accepted. There are also two errors and one omission from the results published in February, "A.R.," which are W3DKJ should have been W3DKT in the 14

C.W. RY VK4HC should have been VK4RC in the 28 Mc. phone section.
W7JL was omitted with 6 points in the 14
Mc. c.w. section. The following are the late logs:-

Transmitting:-47,652 points 14 Me C.W OKIHI FSEO VESQD HAY 14 Me 1,248 Open 14 Mc. CR9AN ILKN HER : 14 Me Open 14 Me 28 Mc 14 Mc LASGA OKICX OK1CX PA0DC Open Receiving:-OE-304 4,140 pts. pts DEM0768 798 1,746 DEM3562 900 28 Mc.: 81 pts DE8025 . . DE3683 . 1,449 pts. DE8119 1,134 360 DE3749 . .

SHIELDING MICROPHONE PLUG

A common cause of r.f. feed-back in phone transmitters is inadequate shielding of the microphone circuit. The ordinary bakelite shell plug may be shielded easily in the following manner: For shielding material, use a small piece of tinfoil taken from an old paper condenser. Do not detach the tinfoil from the waxed paper; instead, cut both paper and foil to size so that when formed in a cylindrical shape, a snug fit inside the bakelite shell of the plug will result. When forming the cylinder, make sure that the waxed paper will be turned to the inside, so that there will be no chance of the foil shorting the micro-phone connections. When the bakelite is screwed back on the plug, the thread will bite into the foil, thus grounding it and making the shielding effective .-QST, May, 1938.

B.C.L. TROUBLE

Ever tried reversing the leads to the 240 a.c. mains-it cured VK5MD's trouble.



CONTENTS-Manual No. 5

Band-Spread All Dry Four Receiver. V.H. Frequency Meter. Sixty Megacycle 15 Watt Transmitter Five-Ten Metre 3-Valve Converter Two Valve Pre-Selector.

28 Megacycle C.W. and Telephony Transmitter.

CONTENTS-Manual No. 6

V.H.F. Circuitry. Short Wave Two Battery Receiver. Single Valve V.H.F. Preselector. Three Valve V.H.F. Straight Receiver. 60 Mc/s Crystal Controlled Transmitter. Valve Base Data. Heterodyne Frequency Meter. Aerial Systems.

Price 2/6 each from your local distributor DIRECTORY OF DISTRIBUTORS

WEST AUST: CARLYLE & CO.

- VICTORIA: J. H. MAGRATH & CO. 208 Little Lonsdale St., Melbourne
- O N S W. JOHN MARTIN PTY, LTD. 116-119 Clarence St., Sydney
- O'LAND: CHANDLERS PTY, LTD. Cnr. Albert & Charlotte Sts. Bris.
- Hay St., Perth & 397 Hannan St., A S A. GERARD & GOODMAN LTD 192-196 Rundle Street, Adelaide
- TAS: W & G GENDERS PTY, LTD.
- 53 Cameron Street, Launceston

Kalgoorlie

Australian Factory Representatives:

KEITH HARRIS & CO. PTY. LTD. 51 WILLIAM ST., MELB. Tel. MB2119

OFFERS YOU ATEST, MOST DEPENDABLE COMPONENTS for FM..AM..&PULSE

FIFTY AND UP

Compiled by VK3OO, to whom all contributions can be sent

VK6 HEARD THE EASTERN STATES

Wide HARDO THE EASTERN STATES

From Western Australia the following, came to
handle the proof of the control of

will be welcomed here."

To the writer, here in VK3, this sounds genuine enough as a report but something seems all wiferency. Not very compilisentary to 3KX, to have "harmoniest" that get over to VK6; maybe 3KX, pulled one weith too many and put the 30 Mc. Transmitter on together with his 14 Mc. rig. (3VI. for example, can transmit on 30 and 3.3 Mc. at

to example, on transmit on 50 and 3.5 Me. at the ame time.)

Anyhow there was plenty of activity in VR3 on Me. at the Me. at the Me. Anyhow t

what is wrong?

"VSJ FILID DAY

TO SMICH, AND THE DO DAY

TO SMICH AND THE DO DAY

AND THE DAY THE DO DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY THE DAY

THE DAY THE

were very weak.

Seems to ye scribe that the country boys are stealing the show at these field days and it is very good to hear them on.

50 Mc. VK3 JOTTINGS

3UI at Tatura (95 miles north of Melbourne) now has a three element close-spaced beam 45 feet high, giving him three 8 points better reports. The difference is very marked in Melbourne. 3UI is using 40 wats to an 807. On 2nd March he celebrated by working 3HZ (130 miles) with 5/5 size beth ways. Also worked 3PG, 3HT and 3ABA with

See signal.

Model with his new 21 Face sick how reports

AMA quite active of late with bount to the

AMA quite active of late with bount to the

AMA quite active of late with bount to the

AMA part of late with late with late with

Model and the late with late with late with

Model and the late with late with late with

AMA and the late with late with late with

AMA a new statute on the Mac Al Serporton

AMA a late with work with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with late with late with late with

AMA and with

regularly. The "f.m. gang" 3RR, 3BD, 3DH and 3HR still going strong, 3DH has f.m. transmitter now; he uses a three tube f.m. adaptor on the receiver, cathode follower (from i.f.) into limiter into discriminator, then back into set audio.

the discriminate their back that set audio. 300 m again bake, "when are you going to 300 m again bake," when are you going to be a set of the s

It is nice to see the friendly spirit that exists on 50 Me. For instance the other night 3BD was couldled up nice and close (in frequency) to 3GE, whilst at same time 3RR and 3DH were even more intimate. Perhaps they were practicing for the days ahead when a 4 Megacycles band width will be a memory! There were no other stations on, by

VK4 50 Me. ACTIVITY

A fewerish burst of activity by VKi Hans on Wedgeldery reveals, 2nd March, Indirect the two Wedgeldery reveals, 2nd March, Indirect the two Wedgeldery reveals, 2nd March, Indirect the two Wedgeldery reveals, 2nd March, Indirect the American State of the State of th

VK6 ACTIVITY 6EC, at Minding, is still putting in good signals and we are all waiting to hear that the receiver is ready Eric. Still no sign of 6MG, Manjimup, nor of 6HT and 6WT of Albany. 6GS, of Harver, has converter going nicely. 6FB, of Mullewa, back from holidays in the city, and we are expecting to work you over that 270 mile

BEWARE! A 24 ELEMENT BEAM ON 166 Mg. 30F expects to put up a 24 element beam on 168 Mc.! Look out for 3QK, 3LV, 3ZU, 3BM and 3OA, all of whom have receivers and expect

tide Mer. I fook out for SQN, 413V, 2731, 3780 to be t

which apparently was started by some crack-pot in using the calls of \$AUM and \$BG to work \$JD and \$NG. The latter has made it quite clear that the Bisley shot tournament is not the only place where guns are used,

The region of the TXX shings on the band, since will be attempted as offert to being the present transvery plants record of an offert as being the present transvery plants record of the miles, and in this contract the transverse of the transverse

Bright Star Radio

1839 LOWER MALVER ROAD GLEN IRIS, S.E.G. Vic. Phone: UL 55:0

TAYLOR TRANSMITTING TUBES

Full Range Crystals as illustrated.



40 and 80 metre. AT or BT cut. Accuracy 02% of your specified frequency. £2/12/6

20 metre zero drift, £5. Crystals Reground, £l each SPECIAL

BENDIX FREQUENCY METRES.

Complete with calibration book, in perfect order. Know your frequency within

The ideal V.F.O. cycles. £30 each Filament, Power and Modulation

Transformers Constructed Prompt Deliveries.

Screw Type Neutralizing Con-densers (National Type) to suit all triode tubes, Polystyrene insulation, 19/6 each.

FEDERAL, QSL and DIVISIONAL NOTES



Federal President .- W. R. Gronow, VK3WG; Federal Secretary .- W. T. S. Mitchell, VK3UM, Box 2611W, G.P.O., Melbourne. NEW SOUTH WALES

Secretary,-Wal Nye (VK2XU), Box 1734, G.P.O., Syd-

Meeting Night.—Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Divisional Sub-Editor -- R Deal 209 Oberon Street

Zone Correspondents.—North Coast and Tablelands: P. A. H. Alexander, VK2PA, Hill St., Port Mag-quarie: Newcastle: E. J. Baker, VK2FP, 13 Skelton quarie, Newcastle: E. J. Baker, VKZPP, 13 Skolton St., Hemition, Newcastle: Cealifields and Lakes: H. Hawkins, VKZPL, 27 Comfort Ave., Cessnock, Westem: G. J. Russell, VKZQA, Canoche St., Nyngin; South Cast and Tablelands: R. H., Rayner, VKZDO, 42 Petiti St., Yass, Southern: E. N., Amold, VKZQJ, 673 Forrest Hill Ave., Abbasis and Amold, VKZQJ, 673 Forrest Hill Ave.,

Zone Correspondents.—North Western: B. R. Minn, VK3BM, Quambatook; Western: C. C. Waring, VK3YW, 12 Skene St., Stawell; South Western: B. Sectrine, VK3BI, 17a Raglan Street North,

Secretary.—A. B. D. Evans, VK3VQ, Box 2611W, G.P.O., Melbourne, Telephone; FJ 6997. Meeting Night—First Wednesday of each month at the Radio School, Melbourne Technical College.

Ballarat, North Eastern: D. Tacey, VK3DW, 18 Harold St., Shepparton; Far North-Western Zone: Harry Dobbyn, VK3MF, 42 Walnut Ave., Mildura; Eastern Zone: J. D. Chilwer, VK3DI, 20 Smith St.,

WI RECADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI.—Sundays, 1100 hours EST, 7190 Kc and 2000 hours EST 50.4 Mc. No fre-quency checks are available from VK2WI

VK3WI.—Sundays, 1130 hours EST 7196 Kc. Soot frequencies every fourth Tuesday WI.—Sundleys, 1130 Nov Spot frequencies every fourth Tuesday, between 7000 and 7200 Kc. every 10 Kc. Individual frequency checks of Amateur Stations given when VX3WI is on the air.

VK4WI.—Sundays, 0900 hours EST simultaneously on 7109 Kc, 14342 Kc, and 52,004 Mc. Frequency checks are given two nights weekly, and the hours are announced during the Sunday broadcasts.

VKSWI.—Sundays; 1000 hours SAST on 7168 Kc. Frequency checks are given by VKSDW on Friday evenings on the 7 and 14 Mc. bands.

From VK6WH.—Sundays, 0930 hours WAST on 7168 Kc. No frequency checks available

VK7WI.—Second and Fourth Sundays at 1030 hours EST on 7174 Kc. No frequency checks are available.

Secretary.- C. G. Augustesen, Box 638], G.P.O. Meeting Night.—Last Friday in each month at the State Service Building, Elizabeth St., City, Digisional Sub-Editor: H. T. MacGregor, VK4ZU, "Moquet," Elidon Rd., Windsor.

SOUTH AUSTRALIA

Secretary.-E. A. Barbier, VK5MD, Box 1234K, G.P.O., Meeting Night.—Second Tuesday of each month at 17 Waymouth St., Adelaide. Divisional Sub-Editor.—W. W. Parsons, VK5PS, 483

WESTERN AUSTRALIA

Secretary.—W. E. Coxon, VK6AG, 7 Howard St., Perth. Meeting Night.—Second Monday in each month at the Builders' Exchange, St. George's Terrace, Perth

Divisional Sub-Editor.—R. W. S. Hugo, VK6KW, 8 View St., Sublaco. TASMANIA

Secretary.—J. Brown, VK7BJ, 12 Thirza St., New-town, Telephone: W 1328. Meeting Night.—First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool Divisional Sub-Editor.—W. W. Watson, VKTYY, 12 Cromwell St., Battery Point, Hobart. Northern Correspondent.—C. P. Wright, VK7LZ, 3 Knight St., Launceston.

FEDERAL.

ALTERATION TO HIGH FREQUENCY BAND As a result of negotiations between Federal Ex-cutive and the P.M.G's. Department the band 144 fol 148 Mc. becomes available for exclusive Amateur use as from the 1st May, 1948. This band replaces the 166 to 170 Mc. band.

DX CENTURY CLUB RULES As previously mentioned in these notes, a proposal was put to Federal Council to amend several of the Rules of the DX CC. It has now been agreed by Federal Council that the amended Rules will be

HAMS WHO LOST THEIR LIVES DUE

R.A.A.F.

- SILENT KEYS-MAYO RICHARDS, VK5WR

MATO HIGHMAND, VANWE It is with regret that we amonine the process of Mayo Richard, VKLWE, Recognition of the polymer of the p

the Federal QSL Manager, the Federal Traffic Man-ager and the Federal Secretary, who shall, if satis-fied that the applicant is eligible for membership in accordance with these Rules, arrange for the member to be listed in "Amateur Radio," under the appropriate section.

Rule 13.—The decisions of the Awards Committee shall be final and binding in respect of any mat-ter pertaining to these Rules.

DX C.C. LISTING

C.W. VK3CN . . 108 (3) Open-VKSBZ . 109 (5)
VKSBG . 109 (4)
Two other applications have also been received but are still awaiting further checks by the Awards Committee. The figure in parenthesis inlicates the Membership Number to the DX C.C. VK3BZ . VK3HG .

WA.C. CERTIFICATES
All applicants for the W.A.C. should insure that
their applications are made through their Divisional
Councils who will submit them to the Federal QSL

CHANGES TO CALL SIGNS, ETC.

VK1288—E. M. Simpson, 12 Merils Street, North Simpson, 12 Merils Street, North 2003—W. W. Wood, Plat 256c, Housing Estate, 210 Merils 12 Merils 201—3. E. Pitts, 67c, 8 Mailton 2014, Canberry, 12 Merils 12 M

288 (in lieu of VK988)—A. Skene-Smith, 30 Malcolm Street, Narrabeen, 2WR—A. Shipley, 65 Brishane Street, Bondi Junction. 2WY-W. L. Butters, Nambucca Heads, North

2WV-W. L Butters, Nambucca Heads, North 2XCust. Nav. 168 Ramsay Street, Haberfield. VK3.W-W. L Nav. 168 Ramsay Street, Haberfield. VK3.W-W. S. Griffiths St. Cauffield. XX.-Y-Commin. 30 Griffiths St. Cauffield. 3KI-T, P. Kirby, 79 Normanby Road, Kew. 3LP-G. Wiburd, 98 Roadys St. Middle Brighton. 3MK-N. D. McKenzie, 18 Porter St. Prahram. Wk4AJ-A. Miller, 164 Boundary St., West Eed,

Brisbane. V.E. H. White, Mount Bassett, Box 303. Mackay.

As Anna Mer of YESASD)—U. S. Jonathan, A. Katala, M. Ka

Cancellations:—

VK2AKT—A. A. Sinfield.

2ALD—Rev. R. B. Dransfield.

2ANV—A. W. Munro.

VK4KF—K. F. Price.

4VO—V. J. Griffin.

VK9BX—N. L. Bonney.

9CV—R. B. Phelps.

207-05. Point.
207-05. Point.
207-06. Point.
207-07. Point.
207-07

longong. I-L. J. McGarrigle, Princes Highway, Engadine. 2TR-R. H. S. Adams, 54 Hurstville Rd., Hurstville. 2YS-S. P. Sorenson, 589 Wyse St., Albury.

VK2AJB—G. C. Churle VK2BQ—F. Easten VK2JV—C. D. Roberts VK2VJ—V. Jalvis VK2VX—W. Abbott VK3DQ—J. D. Morris VK3HN—J. McCandish VK3HS—J. E. Mann VK3NG—N. E. Gunter R.A.A.F. R.A.A.F. A.M.F. A.M.F. R.A.N. VK3OR—M. D. Orr VK3OW—G. L. Templeton VK30W—G. L. Templeton VK3PL—J. L. Colthrup VK3PV—R. P. Veall VK3SP—S. W. Jones VK3UW—J. A. Burrage VK3UW—J. A. Burrage VK3VE—J. E. Snaddon VKSUW—J. A. B VKSUE—J. E. Sn VK4DR—D. Laws VK4PR—R. Allen R.A.A.F R.A.A.F A.M.F R.A.N VK5AF—C. A. Ives VK5BW—G. Phillips VK5BW—G. Family-VK5EM—J. Mann VK6GR—A. H. G. Rippen VK6JG—J. E. Goddard VK6KS—K. Anderson VK7LP—L. P. Hyland . . . R.A.A.F VKTLP—I. P. Hyland A.R.P. The above names and details have been received by Federal Executive. Anyone knowing of any name not included on the above list or errors therein should communicate with F.E. at the carliest. We are indebted to VK50B and VK23T for some corrections to the above list.

TECHNICALLY in the know

more than ever before, it is essential to keep TO-DAY fully informed on electronic matters.

RADIOTRON offers a technical service on valve applications that is unique in the radio world.

RADIOTRON TECHNICAL PUBLICATIONS INCLUDE:

Radiotronics"—quarto size—20 pages per issue-sections devoted to DESIGN. THEORY, CIRCUITS and VALVE DATA-published every other month. Handy filing covers are supplied with

available back issues to "Radiotronics" subscribers.



Data Book-octavo size-150 sheets in loose leaf binder-comprehensive data on all Australian-made receiving typesnew and revised sheets released periodically.

, Valve Charts-quarto size-36 pages covering characteristics, classification tables, socket connections-special section on Australian-made types-comprehensive substitution directory.



US first-hand knowledge on power valves and allied types, cathode ray tubes, the miniature range, circuits and associated components, as released. This information is just another service offered you by Radiotron.

on the latest developments in electronie research. Arrange for Radiotron Technical publications to reach you regularly through the mail. Full particulars are available on enquiry.

AMALGAMATED WIRELESS VALVE CO. PTY. LTD. SALES PROMOTION AND ADVERTISING

47 YORK STREET (BOX 2516, G.P.O.), SYDNEY, N.S.W

Page 16

VK3AB—S. J. L. Abraham, 40 St. Helen's Rd., Hawthorn. 3IN—J. I. Young, 1 First Ave., East Kew. 3RD—H. V. Amor, 26 Crotonhurst Ave., Caulfield. 3YX—J. N. Blake, 185 Beaconsfield Pde., Mid-

31X—J. N. Blake, 185 Braconsteld Pde, Mid-die Patt, "Ring Scophen," c/o.
V850X—E. R. Wilt Co., Fort Adelstide, S.A.
5H.—R. H. Harrey, S. Ada St., Unite,
5.U.—C. S. Schick, 154 Brayton Sc., Bowden,
VRGAZ—H. M. Watson, Hostel, Forres, W.A.
VKTDH—E. C. Sheldrick, c/o. D. M. Richardson, 6
Cooper St., Barnic.

7RB-R. B. McLean, 84 Invermay Rd., Launces.

FEDERAL QSL BUREAU RAY JONES (VK3RJ), MANAGER

Printed rules and proformas of Entry Form for the forthcoming B.E.R.U. contest commencing 9091 GMT 3rd April may be had on application to this Bureau.

A circular from the Secretary (KSNAC), Naval Air Station, Columbus, Ohio, U.S.A., dated 16th February, solicits much information which could have been readily obtained from any call book. The station will be on the air shortly and its mission is "to promote goodwill, to offer a means of exercision for personnel interested in radio, and

ia "to promote good-will, to offer a means of recreation for personnel interested in radio, and to promote world-wide friendly contacts." Purther alterations to Overseas Burcuux:— Canal Zone—C.Z.A.R.A., Box 407, Balboa. Cook Islands—Ray Holloway, Box 65 Rarotonga. Northern Rhodesla—VQ2DH, Box 93, Living.

Phillipines-Elpidio G. De Castro, Radio Train-Pailipines—Elpidio G, De Castro, Radia Training lastitute, Manila in Bureau has been altered to close at the end of February each year latered to close at the end of February each year Executive. For the 11 months ended February, 1948, the total of cards handled by the Bidreau is 71,868 as compared with 22,271 handled during the year caded March, 1947.

NEW SOUTH WALES

NORTH COAST AND TABLELANDS - ZONE Bob Gream (2AFP) has resigned as Zone Officer. Bob could not compete with the man-made inter-ference at the new QTH and Peter Alexander (2PA) ference at the new GITI and Peter Alexander (2FA) takes over 2.54M is moving to Sydney should be AT20 on 7 Mc. Old-tmier 2XO has made a come

COALFIELDS AND LAKES ZONE

COALFIELDS AND LAKES ZONE
2VL celebrated his return from hospital by
working 2LY on 30 Mc. 2Mk has taken up
working 2LY on 30 Mc. 2Mk has taken up
2VR and 2XX still battling on 7 Mc. 2ADT contacted 2GU on 50 Mc. 2RZ continues to chase
exclusive States on 28 Mc. 2RX mas graduated to
2GU has a rig on each band 50 to 3.5 Mc. 2RU
was another to work 2GU on 30 Mc. 2AUU has
a rice been and rig on 28 Mc. 2ACZ on 14 Mc.
about 3Mc. 3MU failing up his post-war constrict
solvery.

NEWCASTE, AND DISTRICT

TOTAL SIZES CONTROLLED IN THE STATE OF THE STA NEWCASTLE AND DISTRICT WESTERN ZONE NOTES

2AMR has new transmitter and v.f.o. on all bands, push-button control, 17 coloured lights, 18

meters and 90 wattail? III has been holidaying the second of the second

SOUTH COAST AND TABLELANDS Tubby Vale (23.NN) resigns from the position of Zone Officer owing to pressure of business and reckons he couldn't stand 7 Mc. to gather news, Roy Bayner (2DO) will be taking over and notes as usual next month.

as usual next month.

SOUTHERN ZONE

Zone Office: 20J still suffering from shock after
being mentioned in despatises by "Gremlin," "A.R."

is still pretsy hot under the collar. Maybe a pirate
anyway. "Gremlin" must be able to twiddle to
follow a v.Lo. around, either "Gremlin" is very
good, or the v.Lo. didn't move very fast!

VICTORIA

would be necessary to organise this work on a different basis.

Mr. T. Hogan, Editor of "Amateur Radio," men-tioned some of the interesting material which was being received by the Magazine and unged members to keep up the supply of technical articles. A great deal of discussion arcse following suggestions by

deal of discussion arose following suggestions by members as to what type of material they desire to see published in the Magazine. Mr. W. Gromow, President of Foderal Executive, announced that the Federal Convention would take hace in Melbourne at Easter. He said that one important aspect of the Convention was the definite planning towards statining the objectives of the

Institute. Mr. Gronow also expressed his appreciation of the fine co-operation of the officers of the Federal Executive throughout the year and urged all memory of the first by organising such features as a transmitter hunt and that these functions should be held more often

and that these functions should be held more often.

A motion was put that an Entertainments Committee from di top promote such functions.

In the formal of promote such functions.

In the time devoted to general basiness for the subnight Mr. II. Kimear (VKKKS) spoke on the subnight Mr. II. Kimear (VKKKS) spoke on the subbe requested to reconsider, and if thought fit, retend their carrier determination that articles written scind their carrier determination that areases writer by "Gremiin" appear in "Amateur Radio" under his own name. This motion was seconded by Mr A. Evans (VKSVQ) and when put to the meeting after discussion, the motion was overwhelmingly

carried.

Council met twice during the month and on the first occasion much business was on the table for discussion that a second meeting was necessary to fully review the agenda for the Federal Convention. only review the agends for the Federal Convention behalf had the Euler Interest arriage out of the meetings is an efficient for the property of the control of the prior general meeting is an effolious. Council, following a metion coursel of the prior general meeting, has seen fit of the control of the prior general meeting, has seen fit of the control of the council of the counc

this Division at such an important function and conference was most apt.

The remaining, decision, and of importance to all, is that QSL cards which are unclaimed after being held for not less than 6 months, will, after call signs concerned have been published both in "Amateur Radio" and broadcust from VKSWI, be destroyed at the discretion of the QSL Manager.

EMERGENCY NETWORK

EMERGENCY NETWORK
When a fire started in hilly bails country 6 miles
east of Springhurst at approximately 1336 hours
on Saturday, 6th March, Henry Fleming (YKSHP)
set up portable equipment at the seems of the fire
set up portable equipment at the seems of the fire
set up portable equipment at the seems of the fire
set up to the country of the seems of the fire
Normal Ruthergies, by 1445 hours. Emergency measages
were sent to the Chiltern Brigade Captain via
VKSBP.

YKSBP.

On Sanday, 7th March, 8HP again operated from the fire area, during the eleaning up of burning serub, etc., and on this occasion Henry worked to floward Wohlers (SYV), at Wangaratta. Emergency messages were sent to the Springhurst Brigade Captain and the Regional Fire Officer at Wangaratta.

GLO-RAD

OFFERS UNUSUAL OPPORTUNITY

to AMATEUR with sound mechanical knowledge. Must be competent turner and fitter, and be adept at fine work. DUTIES will include the fabrication of special parts and assemblies for Radio and Industrial Electronic Equipment, Intruments, proto-types, etc.

FUTURE will depend upon the ability, interest and energy displayed.

Write or Call-

GLORAD ENGINEERING SERVICES 186A Riversdale Rd., (Cr. Robinson Rd.) HAWTHORN ----

Phones: Day-WA 3819. Night-WX 3440

Amateur Radio; April, 1948

The following is a voice of the equipment used no Emergency Station on 2048 for SIPP's trainmittee consisted of a 131 crystal oscillator and the consisted of a 131 crystal oscillator and the consisted of a 132 crystal oscillator and the consisted of a 132 crystal oscillator and the consistency of the consistency of

VKSIS in Melbourne on the network schedule 1045 bours on Sunday, of the Geeloog nutwork work to Several members of the Geeloog nutwork work to the Company of the Company o

Low Drift Crystals

AMATEUR BANDS

ACCURACY 0.02% of STATED FREQUENCY

3.5 M/C and 7 M/C

Unmounted .. £2 0 0 Mounted . . £2 10 0 12.5 and 14 M/C Fundamental Crystals, "Low

Drift" Mounted only £5. Spot Frequency Crystals Prices on Application

Regrinds £1 0 0

THESE PRICES DO NOT INCLUDE SALES TAX.

Maxwell Howden

15 CLAREMONT CRES., CANTERBURY, E.7.

of the tests it was apparent that this district could be well covered in case of emergency. The equip-ment used by the Gelong network consisted of Type 3 Mark II, remodified F86 and base station counment operating on frequencies of 3492 and 6984 Kc. EASTERN ZONE

EAFTERN 200E.

The Enderty Excellent was beind on the Strender Affection of the Strender Affection of the Beauty of the Strender Affection of the Beauty of the Strender Affection of the Strender Affection of the Strender Affection of the Strender Affection Frankeiten, Recorder to Transless 210, and the Strender Affection Frankeiten, Recorder to Transless 210, and the Strender Affection Frankeiten, Recorder to Transless 210, and the Strender Affection of th

interests claim them.

After a short break to allow the tables to be cleared, the Zone needing followed. Officers elected cleared, the Zone needing followed. Officers elected the Zone of the Zone that the Zone that the Zone Law (Zone), 2001; 2001 be continued as at present. be continued as at present.

On Sunday morning members assembled at Maffra.

On Sunday morning members assembled at Maffra.

On Sunday morning members assembled as Maffra.

Sunday morning members assembled as Maffra.

Sunday morning members as a sunday members as a

ops, making a total of 42.

After lunch 31K set up his 50 Mc, receiver and transmitter, Keith gave a very interesting talk on the control of the control of

FAR NORTH-WESTERN ZONE

FAR NORTH-WESTERN ZONE
The formation of this one took place at a meetformation of this one took place at a meettoollewing officers were selected. Precisions, MXX Pull(VXXZO), Secretary, Barry, Thaloso, CXXXXIV);
EVXZO, Secretary, Barry, Thaloso, CXXXXIV;
EVXZO, Secretary, Barry, Thaloso, CXXXXIV;
EVXZO, Secretary, Barry, Barboy, CXXXIV;
Evxxo, CXXIV, CXXIV, CXXIV, CXXIV, CXXIV, CXXIV,
Evxxo, CXXIV, CXXIV, CXXIV, CXXIV, CXXIV,
Evxxo, CXXIV, CXXIV, CXXIV, CXXIV,
Evxxo, CXXIV, CXXIV, CXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV, CXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV, CXXIV,
EVXXIV,
EVXXIV, CXXIV,
EVXXIV,
EVXX

The Zone has been rather quiet over the past month. 3YW has been rather inactive too owing month. AW. has been tabler lineative too owing to beniness moving. Had a clast with our President (20KY) the other day and he was very thrilled with monthing clast rives us a chance of bringing what to most of us are only voices into solid reality, which he intrins to use as a seculier for a new (and permanent) 28 Mc. transmitter. The old round of the contraction of the contraction of the which he intrins to use as a seculier for a new (and permanent) 28 Mc. transmitter. The old round of the contraction of the contraction of the class of the contraction of the contraction of the class of the contraction of the contraction of the second of the contraction of the contraction of the second of the contraction of the contraction of the second of the contraction of the contraction of the second of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the second of the contraction of the contraction of the contraction of the contraction of the second of the contraction location Ian has. location ian has a sign of commercial fame, has discovered, among other things, he cannot operate while 3CV is on the air owing to feed-back into the programme. Kevin has been very busy putting up a 60 foot

tower from oregon collected about the place. After lots of fun and games the tower stood up. It is to have 14 Mc, beams plus all trimmings and a platform at the top to adjust everything right on the nose. 31Q can also take his 50 Mc, gear up there so that he should be able to hear Willies sweet tones from 3XC. Kevin has a 100 watt rig already for 14 Mc.

3HL has just returned from holidays and man-aged to collect a 24 volt, } h.p. motor, from VIM to drive a 28 Mc. beam (possibly a 14 Mc. one also). up so after cropping is over should be going f.b SARP plus YF plus two local prospective Hams had an impromptu hamfest at SAKW over con-week-end, main reason (or visit was to look over 3LK transmitter and of course 3.4KWs.

Heard 3XG (at Kaniva) working 5RA the other Sunday. A nice signal Ben for 15 watts and your 60 watts on 14 Mc. should be better still. Hope to 60 watts on 14 Mc, should be better still. Hope to hear you in the zone hook-up zoon. We are to have a new member in 3Qi from Mornington, who They river has spent quite a glot of time listening on 50 Mc. during the last field day but heard nothing. Is there such a thing as a 50 Mc. band? Anyway boys don't forget the zone hook-up on the second Sanday, 10 p.m., 7505 Mc.

NORTH-WESTERN ZONE

The N-W Zone congratulates their erstwhile spare part, Mildura and district, on their excellent "kick-off" as the new Far North-Western Zone, and we trust that the operation of "multiplication by treat that the operation of "multiplication by division" will be all to the good.

We are pleased to welcome two new members 3GW and 3AIT and two new associates J. P. Troy and D. G. McLennan. We hope to rope in the last two or 4kree non-members to make 100 per cent.

two or three non-members to make 100 per cent.

Our zone was represented at the S.E. Zone Convention by 30M who reports an extra good timevisiting the N.W. Convention on a date to be artanged to suit. There is likely to be a lot of activity on 50 Mc. in our zone very zoon judging by
the enthusiasm aroused in two of our executives on their recent visit to Ham shacks in the city. their recent visit to Ham shacks in the city.

30 A has bought home a lot of gear from the
city and will be on 50 Ms. socs. His was receive

not be shaded by the shade of the shade of the
control of the shade of the shade of the
only. 3This activities have been limited by an
operation, from which we are pleased to say Mr.
operation, from which we are pleased to say Mr.
operation, from which we are pleased to say Mr.
on one occasion he was found in bod, building any
a v.f.o., an th. job tool 3HR is re-building, and
making a lovely job weve heart All' is handled
if he will change his pair as his stay may be short.

3MR visited several Ham salkade down Melborms 3BM visited several Ham shacks down Melboarne way and has been bitten by the v.h.f. bug. Much technical activity, very little operating.

NORTH EASTERN ZONE

Benalla, Smday, 22nd February, 1948. The second N.E. Zone Convention was held there in the Shire Hall, with a good muster of members. Those present being 3AY, 3ABG, 3AOB, 3APF, 3CN, 3DW, 3KR, 3UI, 3WZ, 3YY, also Rou Anderson, Wal Share. Lee Taylor, Alec Dickson and Doug Brook. 3YV occupied the chair and the meeting opened are occupied the chair and the incenting opened with the boys observing one minute's silence, standing with bowed heads as a token of respect in memory of our late member, Bert Buck (3TM). This was most impressive and a reminder to all of us. Need I say more.

Need I say more. General zone business followed, and at the con-clusion of such heavy labor we retired for refresh-ments to a popular local cafe. As has become usual, 3ABG and 3UI again entertained with 50 Mc. portable gear at points 10 miles apart, 3RE's slack being one location at which most of the gabg gathered

Considerable improvement in Alan's and John's 50 Mc. gear yielded a corresponding improvement in the contacts, and, we hope, stimulated sufficient interest to induce more zone members to "Try Six." interest to induce more zone members to "Try Six". Final round-up for the day was at SRPs, and after an boar or two spent in chatting to one another (one of the real treats of these Convention or as the conference of the confere

for Britain Appeal, so keep to proceed amplifies and modulator units—very nice job too. 3HP, 3BP and 3TV very busy on the emergency frequency of 6984 Ke. during the 6th and 7th March, with

bushfire at Springhurst—excellent work done by 3HP. During same busy period 3YV also found time to work ZIs, HCIFG, LAIF, PAOMJH, VS7RM, FSPA on 28 Mc. phone.

QUEENSLAND

QUEENSLAND

Moreh bu QUEENSLAND

Moreh bu QUEENSLAND

Moreh bu QUEENSLAND

At the last
a far at Control I has been concreted. At the last
a far at Control I has been concreted. At the last
a far at Control I has been concreted. At the last
comparison Products of the Control I have been concreted. At the last
comparison to the control I have been concreted by the control I have been c

past year.

Mr. Russell P. Roberts was then asked to propose the toast to the W.I.A. In his speech Mr. Roberts epoke of the pleasure it gave him to speak once again of grid leaks, etc., and mentioned that although his activities did not now allow him to be

active as a Ham, he often took a look around the various bands—"a little different to the old 30 metre days." He appealed to all Hams to stick to the W.I.A. and work hard for it, for it was the institute and the hard working ploneers who had got us the privileges we now enjoy, and by sticking otogether we could keep what we have and get back, in part at least, some of what we had

In his reply to Mr. Roberts, the retiring Secretary (4RT) said that the President had given him some hard tasks but this one capped them all, as it hard tasks but this one capped them all, as it was difficult to respond to a toast so ably proposed, and covering such a lot of ground. 4RT said that he had seen the institute progress from a low ebb with 69 members to the present record of 192 mem-bers. The lisatitute had taken some hard knocks. bers. The Institute had taken some hard knocks, with two wars, and at times, doubtful administration, but had emerged triumphant and it lay in the hands of members to decide whether in completing the building the walls were to be built of granite or of clay. In thanking the Council for assistance, 4RT said it had given him real pleasure to work with them.

The toast to the R.Fs. Department was proposed 4ZU who welcomed the Department and spoke by 4ZU who welcomed the Department and spoke of the pleasure it gave the Institute to be able to look forward to the R.Is. attendance at the to look forward to the R.Is. attendance at the co-operation at all times forthcoming from the Department. In replying, Mr. Corny spoke of the faith which the F.M.G. and in the Institute and said that after listening to Mr. Roberts' talk of old 30 meter days, he would like to be at it himself

old 30 metre days, he would like to be at it nimeses once again.

4KH proposed the toost to the retiring officers, saying in effect that he thought they had done an excellent job, he personally was sorry to see them go. The main point in 4ES' reply was that he hoped that the growth in membership was not due solely to the availability of disposals gear. Herb said he was sure the meeting would join with him in expressing regret at losing some of the old Council, especially 4RT who as Secretary had done Council, esp a grand job.

TXG was called on to propose the teast to the Badio Research Section, Queensland University, and in doing so thanked the Department for the assist-ance rendered during the Section Conference of the assist-tance of the Section Conference of the Assistance of the that he would like to receive reports on v.lst. conditions from YK4 Hams as they were endeavour-ing to compile data on sporadic E occurrence. Re-ports could be sent to the Secretary or through a WI. was called on to propose the teast to the

4FN proposed the toast to the Radio Trade Houses. 4XG responded, while Mr. P. Andrews proposed the toast to the Chairman.

toast to the Chairman. Various competitions were run off during the evening, prizes being a microphone, i.f. transformers, and sets of v.h.f. tubes. Perhaps the luckiest (there is another word) recipient was George Barr (4GB), who had got his licence that morning, worked a G that atternoon and "key-presto" got a microphone that night.

SOUTH AUSTRALIA

SOUTH AUSTRALIA

The munity percent meeting on hold at 17
Mr. mother percent meeting on hold at 17
Mr. p. Writtiams (2007) gare a very interesting
ment of the state of the st

with both hands, or should I say beet, because by the control of t

Now Available

LOW PRICED

PHILIPS VALVES FOR TRANSMITTERS

AND MODULATORS

That new rig you are planning, or the rebuilding of your present set-up can be improved by including Philips' valves types 834 and 830 B. You can make the most of your 100 watts at the higher frequencies by using a pair of 834's in the final stage, while for modulation, of course the anxiety. is a pair of 830B's in class B.

TYPE 834 TRIODE

A transmitting triode designed for use as RF amplifier and oscillator, with maximum ratings up to 100 Mc/s. It may be used at 50% rating as high as 350 Mc/s. Because anode and grid connectors are on top of the glass bulb, high efficiency is obtainable in an amplifier stage arranged to utilise this feature to advantage. Poweroutput at 1000 volts anode supply is 60 watts. Filament voltage 7.5 at 3.1 amperes. Driving power 6 watts. The price is £1/8/9 (plus 2/- duty).

TYPE 830B TRIODE

With 6 watts driving power, two 830B's in Class B audio service will deliver up to 175 watts, at 1000 volts H.T. Zero signal anode current is 20 Mg and maximum 280 Ma. Filament voltage 10 at 2 amperes. This valve is also applicable as RF power amplifier for telephony and telegraphy.. The price-£1/2/3 (plus 2/- duty).

There is a discount of 10% on both valves to licenced amateurs.



PHILIPS ELECTRICAL INDUSTRIES OF AUSTRALIA PTY. LTD.

- MELBOURNE - ADELAIDE PERTH RRISBANE SYDNEY

Amateur Radio; April, 1948

what line of action he could take in Melbourne. A letter was read by our disposals manager, from Y83, which explained the whole disposals position to the satisfaction of all present, and after a lor of members had said a lot about nothing, the meeting closed with the general opinion that a good time had been had by all.

The Council meeting for February was quite an obststanding event, as it was the first night in the new quarters, Maughan Church Buildings. Portion of this building, as you know, is occupied by a commercial broadcasting station and this night was commercial feededating station and unit night, was apparently their community station, and everal elephants were borrowed from the local zoo and as they dunced to the tempo of the music, large chunks of plaster from our ceiling fell at regular intervals who has never quite forgiven me for writing that purarpaph regarding checolates, etc., suggested that if I vest upstairs and joined the elephants in their if I went upstains and joined the deposants in their lance the said elephants would stop in sheer eavy. I distain to the other second to enjoy it, and other second time the second to enjoy it, and some time elapsed before they stopped their fame cackling, in fact "Doc" was almost convulsed. I might mention that two new Council members were present in Jim Paris, representing the associate members, and Dr. Ross Adey, who was co-opted to fill a vacancy recently created. The presence of a real live doctor caused a ripple of suppressed ex-

a real live doctor caused a ripple of suppressed ex-citement to permeate the meeting, although speaking for myself I was a little disappointed became Ross for the partial speaking and the speaking of the local put like any other Ham. I toyed with the idea of urging him to jump up and "whip" out "bocs" appendix and then if I applauded load and long enough perhaps he would remove "Docs" focalls as an encore, but I gave the idea away. Business proceeded at a merry pace until we were noisily inderrupted by a very charming little girl who persisted in looking through the open door. Receiving the high sign from the charman I tip-toed to the door and in my best manner said, "On example of church-going child and I retired dome-what bumillated, more by the guilaws of the Council members than anything else.

We continued on with houtess for a best with unit intermed and he what was approachly the design of the state We continued on with business for a short while

members, with the property of the property of

onto the Congrain series, any more articles upI im beginning the worder just was in the pubI im beginning the worder just was in the pubI im beginning the worder just was in the pubpose of the public through the public through the pubpose of the public through the public through the pubpose of the public through the public through the pubpose of the public through the public through the pubpose of the public through the public through the pubpose of the public through the public through the pubpose of the public through through the public through through the public through through the public through the public through the public th

stay in St. Andrew's Hospital where she underwent an operation from which she is doing very well thank you. We believe that the shock of the "op," was nothing to the shock that she received when she saw the pile of used dishes in the kitchen sink upon her return to the SMD domicile.

upon her referrs to the MID domelect.

If approach that more seeings, a shall intended a fashion note into this column, so here ges. Let's a fashion note into this column, so here ges. Let's and the seeing a fashion of the seeing a fashion of the seeing a fashion of the seeing that the seeing the seeing that the seeing that the seeing the seeing that the seeing th colar and Erwardian the gave him a dishing expecta-tion of the day of the collection of the collection of the through a part of day gisses. Writer I knows the through a part of day gisses. Where I knows the expect of the collection of the days because each was wearing an exclusive mode-draw because each was wearing an exclusive mode-draw because out the production of the collection of the through the principle of the collection of the collection of was petitic "Doe" Rather who arrived wearing this was petitic "Doe" Rather who arrived wearing the rather than the collection of the collection of the petitic petition of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the collection of the petition of the collection of the petition of the collection of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the collection of the collection of the petition of the collection of the petition of the collection of the collection of the collection of the collection of the col

come we now quite here whether he was proving on any copies ones more failed need some any copies on any copies one more failed need some any copies of the remember the nights and nights of stuly necessary to achieve success. How these prospective numerurs and then pass the examination is beyond the realing of fancy. Listen fellows, this Ham ticket is not that easy, why I could name plenty of chaps who that the control of the control of the country of the students of the control of the country of the country of the country of the country of the lack of technical ability but because they took it to case, especially the code. Instructors, no mit-

too casy, especially the code. Instructors, no mat-ter how good they may be, cannot turn out success-ful students without the co-operation of the mem-bers of their classes, and this means hours of concentrated study at home in preparation for the nex lecture or code classes. With the beginning of centrated study at home in prevaration for the next lecture or code classes. With the beginning of the new year classes it is suggested that all students look upon the classes with a true perspective and give their instructors all the co-operation they can. It any student is not prepared to do this, well why not spend the class fees and buy a short ware set and settle back to years of short wave listening. set and settle back to years of short wave listening. The word "Printe" as applied to Amateur Radio has never home the implication that it does who applied to the normal run of things. Prior to the applied to the normal run of things. Prior to the contract of the set of the

midnight, worked among themselves and endeavou to sit for the examination as soon as possible. to sti for the examination as soon as possible. The power was small and many at op Amateur today provers as a power of the power of the power of the "pirate." Today, however, the position is in re-verse. The average "pirate is an obsorious, loud-mouthed 'disweit." He may as much power as he can, comes on the air at the worst times from a control of the pirate of the pirate of the pirate of the for a ticket. Driven off most bands by the co-certed action of all Amateurs he is now domicile certed artion of all Amateurs he is now domicited on 160 Me. to the general amoustone of the gang on 160 Me. to the general amounts of the gang this month by the rotten trick played by one of these "clucks" upon one of the Hencede Harms. The second of th

Special

Crackle Finishing on chassis (Grev. Brown or Black)

48 Hours' Service -Reasonable prices. An ideal finish to your metalwork.

DISPOSAL CRYSTALS

Suit Amateur Band. AT and BT Cut from 30/-.



TRANSFORMERS

Wound on large core of highest quality iron. Reasonably priced, write for prices enclosing specifica-

Major Radio & Electrical Co.

189 GLENFERRIE ROAD. MALVERN

WM 1814

U 9354

up by this stupid joke. It is hard enough worl picuceving these high frequencies without becoming the possible target for some moron with a warpesense of humour, not forgetting the harm it does to Amateur Radio as a whole. Look here fellows, wake up to yourselves, the W.I.A. will do all it wake up to yearnelves, the W.I.A. will do all it can to help you get a ticket and will welcome you as a member, but not if you borrow other chaps calls and try and how a genuine Ham, especially as the high frequencies where so much exploratory over its being done. Just in closing, don't be tee fure that we don't know who the chap was.

ment he bring done, Jun in editing, don't he to be placed and the placed and the

mightier than the 100 watts. To prove this VK5BY grabbed himself a W.A.C. in a few hour by working PSBS, SVIRX, PSPQ, CTAT, CESCD WROBY grauped mines, by Writer Pales, Crart. CEGCD, by working PSBS. SVIRX. PSPQ. Crart. CEGCD, YSGAL, VSkWL, FADJB, W2FKA, and VK5DG. I vow! mention the amount of night oil burnt to schiere this success, but considering the way that DX has been lately, it was a swell job. Dougal, for

NORTHERN TERRITORY ACTIVITY

Victorian Division to avail themselves Secretary, Mrs. Cross, who will furnish suitable introductions and information if requested



TELL REPORT



Electrical and Testing Instruments for all purposes made to British Standard specifications. Each instrument is accurate, if or , to 2 per cent, and parts are heavily plated to prevent corrosion even under tropical conditions. "Healing" Electrical Meters equal the best imported types and will give accurate service for long periods under the most exacting conditions.



No. 10A round production mounting Black Bakelite Case.

Type No. 30A 4" square semi-flush Black Bakelite Case.



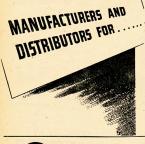


No. 20A 2½" round flush mounting Black Bakelite Case.

These, and all other Healing Radio Electrical Testing Units, are manufactured in our own factories and available from A. G. Healing Ltd.

OTHER INSTRUMENTS INCLUDE:

Oscillators — Multi-Testers — Signal Tracers, etc.



ALSO MANUFACTURERS AND DISTRIBUTORS FOR



Golden Voice

A, G, HEALING LTD., Melbourne, Sydney, Adelaide W\$\$TERN AUSTRALIAN DISTRIBUTOR: Clook's Mousehold Utilities, SSS High Street, Petra BRISEANN EPPRESENTATIVE Lone, Bosement, A.A.P. Building, Queen Street, Brisbone Lone, Bri

WESTERN AUSTRALIA

As this issue went to prose early, notes for March meeting were not available. The new Collection President: W. H. Dodg, *8H! Ylvee-President: W. H. Dodg, *8H! Ylvee-President: W. G. Moss, 6GM, Secretary, W. E. Coxon, 6AG, Treasurer, R. W. S. Hago, 6KW, Country Lations W. S. Hago, 6KW, Country Lations S. Sill was again elected Qsl. Manager, 6GM being gederal Councilier, will represent YK6 at the

PERSONALITIES

ON, Two bases again from the Enderth States ON, Two bases again from the Enderth States a host of these for the color of the States as host of these for the color of the States and the St

America. 2017 It is unlikely in the result of the control of the c

DX OF THE MONTH

28 Mc. Phone.—This band has shown considerably more promise during this last month and although the number of \$205 had, have not been great, the pickings have been taken. Close skip to the north and cast has also been apparent from the number and cast has also been apparent from the number § V8s and X1s heard with terrificelly strong signals. Europe.—This theatre, which always seems to exarm with active Amateurs, has provided an in-teresting hunting ground, particularly towards the latter half of the month. Ga (both new and old) have been there in droves, some of them with signals like locals—GWNT in particular, the number signals like locals—G6WW in particular; the number worked being too numberons for mention. GMENA. Provided being too numberon for mention. GMENA. Provided by the provided by open to any degree at all ZCONF. Palectine, is stirtly consistent as five QSOs resulted with him during February. ARSAB, Lebason, has also been worked a few times and seems to spend a fair time to the constraint of the constraint of the interesting to note that Korsen stations, whose per-tages was 15, have been changed to HL1 and quite a number may be heard each morning handling raffic with the States.

ranfie with the States.

Aftica.—A few chaps from the contineer have the few chaps of the contineer has the few chaps and the contineer has the few chaps.

Aftica.—A few chaps worked were ZeSaB, toX; and 612-bit from the Union, and 042-bit Relgian Congo. their presence knows particularly of an afternoon, 82 bits reports, have been given both code on many chaps are to the contineer to the contin

of these (SO)s. Kas from the Phillipties have gut in excellent signals in the mornings but Ilke the in excellent singuals in the mornings but Ilke the interest of the singuish of the singuis redominent, VE5E madians contacted.

Canadians contacted.

14 Mc. Phone,—This lower frequency band ha-not provided the DX it did last summer by any means, but some very interesting rardies have come to light from some of the close-skip areas to the

Europe.—Conditions have been very poor from the continent but the few QSOs resulting have been on the whole, quite good. FSMY in Toulous France, was bury one night recording transmissions and playing them back, and this contact turned out to be the most interesting of the month. F9EH and 2HO were the only others worked from France. MB9AA is getting pretty consistent now from Southern Austria. SV0AD Greece was the only

other European. Asia—quite a few rare ones were worked and also proteined new countries in some cases. WEND INTERPRETATION OF THE PROPERTY OF

the remainder.

Oceani—RGGAW/VK9 Los Negros, Admirally Islands, has a VK3 doing a lot of operating lately and Frank is a very interesting QSO. KHGKB/KB6 in Canton Island had a fine signal when worked. VRSPL, Tonga Island, was the only other Pacific remainder South America.—As usual HK1PQ, Colombia, was worked. Yery seldom go long before saying hello to old Victor.

Central America.—A few QSOs in XE1BA and AC Mexico; YS1GZ San Salvador, CO7CX Cuba, Central America.—A few QsOs in XEIBA and 1AG Mexico; YS1GZ San Salvador, COTCX Cuba, and VP8P Bermuda.

North America.—We very spasmodic during the evenings but one morning toward the end of the month a string of W6s were worked the long way around via South Africa. The only Canadian was VEZPI late one evening.

TASMANIA

ANNUAL GENERAL MEETING AND DINNER ANNUAL GENERAL MEETING AND DINNER On 28th Performary the claim gathered from tar forty-two present, including as visites. Dr. Penerod (VKKBB), who brought the Burnis gang: Penerod (VKKBB), who brought the Burnis gang report and lashness sheet. Mr. Catter (7AK) epoke appearance of the annual propert and lashness sheet. Mr. Catter (7AK) epoke memory all present stood and observed a minute's memory all present stood and observed a minute's

memory all poems stood and observed, a minute's minute of the poems of the counts being a stood of the counts being a stood of the counts being a stood of the counts of t

General discussion of the year's doings continued until shortly before 7 p.m., when the meeting

mill aboutly before 2 p.m., when the meeting Due thing, by the way, which has some of the Due thing, by the way, which has some of the cast of the modify and appear to the milltides has made and the source of the modify and appear to the milltides has been appeared by the property of t

ministic Mr. M. L. Week, of the Overnee Tele-communication Commission; Mr. C. Garroll, Radio Inspector; Mr. G. Hughno, 17ES partner in a world; william; see the Contact Goody, States, a world; william; see the Contact Goody, States, a Following the Loyal Toast, Mr. Weeks, well up to the Commission of the Commission cannot avoid estanglement in the Institute's active little when a certain const-taint operator may. "How about exchanging Smidy, the boys are having confidence and commendable briefly the President, who knew there was only one harred. At insely tout to those who keep a tolerant, but insentient worried, eye upon the inhabitants of the Ham bands of the President was the contract of the President's activities and some fatherly advice about wasting watts on drain pipes, and voids on members of the father of the Brestreiner's activities and some fatherly advice about wasting watts on drain pipes, and voids on members of the fatherly active to the president of the fatherly active to the president of the fatherly active the pre

Australia's Largest Stock

All Radio Components

Chokes Coile Condensers Intermediate Transformers Morse Equipment Potentiometers

etc., etc. Resistors Soldering Irons Speakers Test Equipment

Vaives Pick-Ups Power Transformers etc., etc.

Obtainable from

Bloch & Gerber Ltd.

with which is associated the

WELDON ELECTRIC SUPPLY CO.

46-48 YORK STREET, SYDNEY

G.P.O. Box 2282 M Phones: MA 6291 (10 lines) Terry Connor (70T) then proposed "The Pro-fusionals," which left some of us on the horns of a dilemma, not knowing whether to stand up or st down. The point was enlarged upon in his re-sponce by Gordon Hughison, who thought that, if a professional could be defined as one who makes money out of radio, we all may just as well call

promoting a control of the control o

NORTHERN ZONE

Amateur Radio is breoming more and more popu-r in this zone. In the Launceston area we now are twelve active or near active stations in an ea of two square miles. Perhaps one is putting have twelve active or near active stations in an area of two square miles. Perhaps one is putting friendedly too much to the test when it is said that this month we welcome still another member to this zone as a VKT. He is ex-VK3ANL. With this increase in numbers it is becoming increasingly apparent that we will have to pay particular. to our transmissions in an ende

Index agreement that we will have to you particularly appropriate the control of out a very nice signal on 7 Mc. As soon as all these new members settle down we hope to call a general meeting in the zone and so give everyone a chance to get together for the mutual benefit of

CORRESPONDENCE

USE OF CALL SIGNS IN ADVERTISEMENTS

Wireless Branch, Treasury Gardens, Melbourne C.2.

The Federal Secretary, W.I.A. Dear Sir,

The December issue of "Amateur Radio" contains

everal advertisements in which appear Call Signs

which have been allotted for use of Amateur

stions.

Since Paragraph 124 of the "Handbook for Optors of Amateur Wireless Stations" etipulates at such Call Signs are issued to licences for ation identification for communication purposes lip, and forbids their use in connection with usiness activities or interests, the licencess communications of the content of the only, and forbids their use in common business activities or interests, the licencess cerned have been requested to refrain from mitting use of Call Signs in future advertising. In order to guard against repetitions of such infractions it would be appreciated if the Institute

would be good enough to co-operate with the De-partment by arranging for deletion of Call Signi-tron all advertisements below publication, inform publishers of similar journals concerning the De-partmental attitude in this matter. Yours faithfully, The Chief Inspector (Wireless).

THOSE ARTICLES AGAIN

Editor, "A.R.,"

1 Byron St., Box Hill, E.11.

May I have a little more space in which to air
may views on those articles? My first letter was, I
must confess, written in a hurry and I don't think
I made things very clear. I did not want to suggest
that "A.R." should be filled from cover to excee 1 Byron St., Box Hill, E.11.

make schools werrom in there's and door thick that A.M. shall be filled from over to cover the control of the c

cover a wide econo---lentitary type for those that want it through to theoretical discussions on advanced subjects—and that the advanced boys should not earlil at the spice given to the elementary boys. To conclude, I would like to point out that there are a lot of rotter signals about and the only way to clean them up is for everyone on the air proving everyone's knowledge will improve their signals, and you can't improve knowledge by going over old staff in works of one syllable.

-F. L. JOHNSTON, VK3EL

DISPOSALS GEAR 27 Scarborough St., Somerton, S.A.

Editor, "A.R.,"

Your Editorial, and the article by 54.6 on safety measures in regard to the average Ham rig were indeed timely and I hope a few of my mates will take heed before it is too late, and another name is added to \$15tent Keys.

added too. Silver, Keys.

I get cold wherea and a contraction in my in-nards wheever I see one Ham of my acquisitance changing bands or runing up. weed or two on this disposals business. It seems there are hard feelings and hard words, the Ham fraterity is being divided into 100 camps, the "laves" and the third time and the contraction of the contraction of the hard time and the contraction of the contraction of the with externice gear before a rig can be built, and I shave yet to see a real largest in that has come

The year to be a real longial that has come from any disposal sections of the inching but have a second of the particular section of the particular section of the particular section in the particular section is a second of a real particular section of the particular section of little rigs." OK well for Pete's sake after the dashed things, and get a monitor or a honest friend

to litten and advise, we of it, there is more work both mental is not always, in re-building one of these things than in building a new rig, and anywer, in which would be most with half a brain, can resons which would be most with half a brain, can resons which would be most who are squeeding like, children deprived of their offers, over the distribution of disposals, give the force, over the distribution of disposals, give the box, and I bet you can find more useful gear lying box, and I bet you can find more useful gear lying that you will get in most of this ex-Service but the control of the cont

Antennae can be constructed of materials other than dural tube and fed by means other than co-ex-cable. Tubes and components are readily available at most radio dealers, and should enable the most inexperienced Ham to get a rig working on any of the frequencies below 50 Mc., and I for one of the frequencies below 50 Me., and 1 for one think it is about time there was more brain supplied to the working of the gear we now possess and less childish acreaming about disposals, CHARLES BRIMBLE, VK5CB.

A GENTLEMAN'S AGREEMENT?

48 Vanko Ave. Waverley.

The following suggestion will no doubt bring screams of rage from the younger members of our amateur community, but it is made nevertheless with a view to rationalising our mode of band occupancy for our own good.

Editon "A D "

occupancy for our own good.

The band upon which most hewly licensed
The band upon which most hewly licensed
region, lared there by the attraction of world DX.

Very few of the newer hands are attracted to such
coperation, but they burnt forth in printing sign
operation, but they burnt forth in printing sign
operation in the sign of th than the strictly c.w. counterpart. Apart from the fact that so many strike the usual teething trouble of parasities and spurious radiations of all kinds it is the mode of operation relative to band secupancy with which this suggestion deals.

Sooner or later the DX urge passes somewhat, and Mr. Newphone, who has heard one or two of his 200 mile distant colleagues only under short skin conditions, turns to the 7 Mc. band for his 200 mile distant colleapus only under these the collection of the band,

He float, that the bond is quiet only on rare occasions, that most times it is a whird of activity lie gets lets of QRM from both c.w. and phone, but gaps in the current of stations, he notices (I be can read c.w.) that there ARE DX nations about, may posseds intergring call signs such as GALL (JAOPK, or ZDOTD, in other words, there is DX arranged of very the control of the cont

Before the late, but unlamented, war it will be called that VKs had a few years of operation on forty" during which there was a rarely broken Gentleman's agreement" (not any P.M.G. Regula-"forty" during which there was a rarely broken "Gentlement" (not any P.M.G. Regulation) that established a state of affairs where phone agrivity ceased at 1990 hours E.S.T., and from then on it was c.w. Remember! Is it asking too much that in these times of modernity we rescusitate that thinking about. -D B. KNOCK, VK2NO.

"OPENLIN"

Letters have been received from H. Kingsley Love (3KU), Ray W. Cranch (3LW), Yor Morgan (3DH), F. J. Hine (2QL), H. G. Williamson (3GW) and Alan W. White (2AWW), all of whom were full of praise of "Gremlins" efforts to clean up signals on the Amateur bands, and expressing a wish for the early return of "Gremlins" motex.

Elsewhere in this issue readers will note that "Greenlin" is back. And while it is desirable publish letters in the Magazine, I feel that as the Victorian Council has permitted "Gremlin" to carry on under a "non-de-plume," no good parpose the Victorian Council has permitted "Gremin" to carry on under a "nom-de-plume," no good purpose will be served by publishing letters which contain only praise for "Gremin" and a request for his return. It is impossible to publish every letter received, so if your letter does not appear, please do not take offence.—Editor,

FOR SALE. EXCHANGE, WANTED

9d. per line, minimum 2/-

WANTED .- Dust Cover for AMR200. T. D. Hogan, VK3HX, 127 Oakleigh Rd., Carnegie, S.E.9 (Phone: UM 1732).

WANTED .- Nerve Box for AMR200 complete or incomplete, dials, coils or formers for same. R. Higginbotham, VK3RN, 43 Eleanor St., Ashburton, E.13.



EQUIPMENT

Precision in Design and Construction



Red Line Equipment Includes :-

- High Tension Plate Transformers
- Low Tension Filament Supplies *
- Class B Driver Transformers
- Multi Impedance Modulation Transformers
- Heavy Duty Power Supplies
- Swinging and Smoothing Chokes
 - Wide Range Audio Equipment
- Frequency Dividing Networks
 - Insulated up to 4000 volts if required

RED LINE EQUIPMENT Pty. Ltd.

(Incorporating SWALES & SWANN)

Technical Service, Wholesale and Manufacturers: A. T. SWALES, Cen. 4773

2 Coates Lane, Melbourne

A GUARANTEE



Trade Sales: Allen SWANN
MU 6895 (3 lines)
157 Elizabeth Street, Melbourne

OF DEPENDABILITY



MELBOURNE: Lawrence & Hanson Electrical Pty. Ltd. Replacement Parts Pty. Ltd. Vealls Electrical & Radio

John Martin Pty. Ltd. George Brown & Co. Pty. Ltd. Fox & Macgillycuddy Phillips Electrical Industries of Aust. Pty. Ltd. Australian General Electric Pty. Ltd. ADELAIDE:
George Proctor (Factory
Representative)
Newton, McLoren Ltd.
A. G. Heoling Ltd.
Harris, Scarfe Ltd.
Oliver J. Nilsen & Co.
Unbehaun & Johnstone
Ltd.

TASMANIA:
Lawrence & Hanson
Electrical Pty. Ltd.
(Hobart).
Lawrence & Hanson
Electrical Pty. Ltd.
(Launceston)
Reolacement Parts Pty

BRISBANE: Chandlers Pty. Ltd. A. E. Harrold Pty. Ltd. B. Martin Pty. Ltd.

E. Harrold Pty. Lt Martin Pty. Ltd. PERTH: